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ABSTRACT

Designed to build up concepts presented in the Master Curriculum Guide volume "A Framework for Teaching the Basic Concepts," this collection of teacher guidelines and classroom lessons focuses on how economic concepts and an economic way of thinking can be incorporated into various units in consumer education courses or in courses at the secondary level that contain units on consumer education. Material is divided into four sections using related clusters of economic concepts that are important to consumer economics. Each of the sections provides an overview that serves as teacher background. Section 1, "Decision-Making and the Consumer," contains lessons and strategies on profits, the two-career family, household production, scarcity, choice, and trade-offs. Section 2, "Functioning of a Market," contains materials on marketplace interdependence, market failures and access to information on decision-making, the consumer price index, and price changes. Section 3, "Effects of Government Action on Consumers," looks at consumer protection. Section 4, "The Interrelationships among Government, Business, and Consumer Decisions," contains simulations on monetary control, corporate crisis, and increasing productivity. Appendices list supplementary materials and sources of information. (LP)

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MASTER CURRICULUM GUIDE IN ECONOMICS

TEACHING STRATEGIES

CONSUMER ECONOMICS (GRADES 7-12)

U.S. DEPARTMENT OF EDUCATION
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Foreword

Teaching Strategies are part of our *Master Curriculum Guide in Economics* (MCG). The strategies are designed to be used in conjunction with the MCG volume *A Framework for Teaching the Basic Concepts (second edition)*. The *Framework*, presents the conceptual structure of economics that students should master by the time they graduate from high school; the strategies illustrate how this conceptual structure can be taught at various grade levels in the K-12 curriculum.

The MCG has been made possible by generous contributions from many dedicated sponsors. We appreciate their confidence in the economic education movement and their support of it. The present volume was generously funded by the American Express Foundation and the Fireman's Fund Insurance Company Foundation. They were the major underwriters of the five-year National Consumer Economics Project, in which 145 teacher-educators on university faculties were taught economics and how to integrate the subject into units of study in consumer education. These faculty members, in turn, have trained thousands of teachers who have taught and continue to teach countless members of students with lessons and activities such as those contained in this volume.

We know that the MCG *Teaching Strategies* give teachers practical guidelines with which to introduce lessons in economics into existing curricula. When used by trained teachers, the MCG is a powerful means with which to provide instruction in economics at all grade levels.

Michael A. MacDowell
President
Joint Council on Economic Education

Preface

The *Master Curriculum Guide in Economics (MCG)* is a tool for curriculum development in the K–12 grades — it is not a curriculum per se. The MCG volume *A Framework for Teaching the Basic Concepts*, second edition, presents the economics concepts with which students should be familiar by the time they graduate from high school. The other volumes, the *Teaching Strategies*, provide teacher overviews as well as classroom lessons that illustrate how these concepts can be taught in various grades or at various levels of difficulty. Thus, the *Master Curriculum Guide* indicates what economic ideas should be taught, at what levels they ought to be taught, and how they can be taught.

The present publication, *Consumer Economics*, is one of several *Teaching Strategies* for the secondary level. It complements *Basic Business and Consumer Education*, an earlier publication in the MCG series. *Consumer Economics* focuses on how economic concepts and an economic way of thinking can be incorporated into various units in consumer education courses or in courses at the secondary level that contain units in consumer education. Its lessons can also be used in economic courses offered at the secondary level.

All but two of the lessons in this guide were gleaned from those developed by 145 teacher-educators who were involved in the National Consumer Economics Institute programs, which were held during the summers of 1979–83. The institute programs focused on economics and how to integrate it into consumer education units. The teacher-educators were asked to develop instructional strategies to integrate economics concepts into the curriculum. They were asked to use these and other strategies in an in-service program for teachers that they conducted in cooperation with their JCEE-affiliated State Council on Economic Education.

Because of space limitations, all of the plans developed by the institute participants could not be included here. An editorial board of leading consumer economics educators from various branches of that discipline was established to select the plans to be published. Members included Robert Ristau (committee chair), H. Michael Hartoonian, Peter Senn, and Ruth Thomas. The board determined the general organization of the publication and then did the initial editing of the plans, which in a number of cases resulted in several plans being combined. The board also arranged to have the plans field tested in schools near their universities.

Consumer Economics is divided into four sections utilizing related clusters of economic concepts that are important to include in consumer economics units. Each of the sections provides an overview that serves as a background for teachers who employ the lessons. For additional background, teachers should use the second edition *Framework* volume of the *Master Curriculum Guide*. The *Framework* contains an explanation of each of the economic concepts used.

The appendix contains two special aids for teachers: a catalog of suggested supplementary materials and sources of information and a matrix that shows the relationship of typical consumer economics units and of economics concepts to the lesson plans.

The Joint Council is indebted to the many people who contributed to this publication. They include the participants in the five Institute programs, the editorial committee for this publication, and the secondary teachers in the Minneapolis, Milwaukee, Chicago, and Ypsilanti areas who field tested the ma-

terials. We also appreciate the work of the Project Executive Committee and the Liaison Board for the Institute project who helped shape the programs in which the original plans were developed. (The list of committee and institute members follows the preface.)

We are very grateful for the assistance given by the funders of the project. The major contributors were the American Express Foundation and the Fireman's Fund Insurance Company Foundation. We also received support from the Shell Companies Foundation, Monsanto Fund, National Automobile Dealers Charitable Foundation, J. Howard Pew Freedom Trust, Esmark, Inc. Foundation, Lever Brothers Company Foundation, Inc., Exxon Company, U.S.A., General Mills Foundation, State Farm Companies Foundation, SAFECO Insurance Companies, Firestone Tire and Rubber Company, RCA, Bristol-Myers Fund, Chesebrough-Pond's Inc., and PepsiCo.

A special word of appreciation is extended to Steven Halsey of the American Express Foundation for his continuing support and encourgement of the myriad activities associated with the National Consumer Economics Project. Thanks also to June V. Gilliard, curriculum director at the JCEE, for reviewing many of the lessons.

Consumer education units are natural vehicles for the teaching of economic concepts and an economic way of thinking. We hope you will find these lesson plans to be an effective means of including more economics in your curriculum.

John E. Clow
Director
National Consumer Economics Project

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1

DECISION-MAKING AND THE CONSUMER

Scarcity is a fundamental concept in economics. Scarcity results from the imbalance between relatively unlimited wants and the relatively limited resources with which those wants can be satisfied. Because of scarcity, people must make choices about how best to use these limited resources in order to obtain the most satisfaction.

Economics has been termed the discipline or study of choice making, since it provides analytic methods that can be used to make rational choices about how to employ limited resources. Individuals should be able to utilize these methods when they make buying decisions in the marketplace. People also use these analytic methods to make decisions regarding such matters as which jobs to seek or accept, how to invest their savings, how to use their leisure time, etc. Managers in business, nonprofit, and government organizations also use economic analysis — explicitly or implicitly — for most or many of the decisions they make.

The lesson plans in this section deal primarily with the personal decision-making processes of consumers. We hope, however, that teachers will also use the lessons to show how economic analysis can be employed in any situation in which people wish to use limited resources in order to maximize their satisfaction.

CHANGING PERCEPTIONS REGARDING SCARCITY

Scarcity has always been a fact of life. At a given time, there are limited amounts of labor, capital, and natural resources available with which to meet all possible demands.

But since World War II, the psychological view of scarcity has changed — particularly among the postwar generations. Many younger people tend to act on a perception of abundance rather than scarcity.[1] The effect has not been to eliminate scarcity but to change the way people deal with it.

The attitude with which people approach scarcity and abundance can have a direct effect upon consumer behavior. David Riesman, in his book *The Lonely Crowd*, contends that consciousness of scarcity impels individuals to show concern about the need to produce more.[2] When such an attitude dominates, it encourages personal thrift, prudence, and abstinence. If, instead, abundance is perceived, individuals emphasize consumption and enjoyment.

How individual students perceive scarcity determines, to a large degree, the psychological outlook with which they approach decisions about spending, saving, working, and their attitude toward the short run versus the long term. Such perceptions influence the use of any decision-making model.

Teachers will generally find that their students will differ in how they perceive scarcity, partly because of differences in family and social backgrounds. These variations will determine how students structure decisions about using resources — their own or those of society.

HOW TO APPROACH SCARCITY IN CONSUMER EDUCATION CLASSES

Economics focuses on the scarcity of labor, natural resources, and capital goods (machinery, buildings, transportation equipment, etc.) with which to produce goods and services. These scarcities, however, may not be very real to many students. They may see or hear about considerable unemployment or unused capacity in plants, and thus question why economics states we have scarcities of resources when some are not used. The answer is that unused resources are a sign that we are not using all of our resources effectively or efficiently to produce goods and services which are wanted. Seen as a whole, the world community has only so much land, labor, and capital, and they are insufficient to produce all the goods and services the world's population would like to have.

Some students may wonder about scarcity when they see many stores filled with goods or even running sales in order to get people to buy more. A primary reason why the shelves are laden and sales occur is that some people cannot afford to buy these

1 See David Potter, *People of Plenty: Economic Abundance and the American Character* (Chicago: University of Chicago Press, 1954).

2 David Riesman, *The Lonely Crowd* (New Haven, Conn.: Yale University Press, 1950).

goods or can afford only limited quantities. Prices — including sale prices — perform the function of allocating goods to those who want them and can pay the market price for them. Thus, if an item becomes more scarce relative to the demand for it, the price of the item goes up; if it becomes less scarce, its price goes down.

On the personal level, people encounter other types of scarcities. People generally do not have all the money necessary to buy all the things that they want. This affects people at all socioeconomic levels: consumers who move up the income scale tend to find that their wants increase along with their income; those who already have high incomes may have many — or expensive — wants. A primary aim of consumer economics is to assist students to get maximum satisfaction from the money income they do attain at various stages in their lives.

Time is a special type of scarcity that consumers face. There are only so many hours in the day and only so many years in a life. Hence, people must make choices about what they are going to do with their limited time. The most important choice is probably about the amount of time they wish to devote to earning income as opposed to the amount devoted to leisure. Consumers must also decide how much time they wish to give to shopping, raising children, learning new skills, etc. Since the time of consumers is limited, they must allocate it among all its possible uses. Thus, it is important that individuals develop skills in decision-making to help them make rational choices in order to derive the most benefits from their resources.

THE DECISION-MAKING PROCESS

In a broad sense, and as the term is used here, decision-making is the process of reaching a conclusion with respect to personal or group actions that affect economic well-being. More often than not, decision-making, or those mental operations we call reasoning, takes place unconsciously. Our purpose in this group of lessons is to make more explicit a decision-making model for consumer use, and to provide some successful classroom lessons and strategies that concern consumer economics.

In its simplest form, the process of decision-making can be reduced to a problem-solving model that consists of the following five steps:

1 Ascertaining the issue or problem and stating the facts;

2 Determining alternative solutions to the problem;

3 Listing the personal or social goals (or criteria) bearing on the problem;

4 Evaluating the alternatives according to the goals or criteria;

5 Making a decision based on the evaluation.

This process can be used for many decisions that relate to an individual's or society's values and goals. For example, it can be used to determine whether a given sum of money should be devoted to spending on new furniture or a vacation, or whether the money should be saved. In this instance, the criteria used would be related to personal values and goals. The process can also be used to determine whether one should vote for a candidate who wishes to spend more tax revenues for social programs as opposed to a candidate who wishes to spend more tax revenues for national defense. In the latter instance, the criteria used to reach a decision will primarily relate to broad social goals for our society. These include freedom, economic efficiency, economic equity, economic security, full employment, price stability, and economic growth, as well as others such as national defense.

Quite commonly, people making personal decisions in the marketplace consider only their own values and goals — not those of the society. For example, a consumer may buy a particular automobile because of its pleasing style and competitively low price, even though it may generate more pollutants than other vehicles. In such cases, little attention or weight is given to social costs.

Some people make their decisions in the polling booth almost entirely in accordance with how they are personally affected. For example, some voters may turn down additional taxes for schools because higher taxes will result in less spendable income for themselves. Such individuals may or may not have given sufficient consideration to the social consequences, such as the community benefits that increased resources for the schools may provide.

VALUES: CRITERIA FOR DECISION-MAKING

Decisions rest partly on personal and social values. An individual's preference for one sort of car or home or type of clothing rather than another sort is a function not only of income but also of personal

values and tastes. Furthermore, these decisions have social consequences.

In making a decision or judgment, either personal or social, we look at the relative desirability of two or more values or courses of action. As we select among alternatives, we also frequently select among values: a specific satisfaction, a specific positive result for ourselves or others, a specific benefit we wish to foster. Decisions have consequences, and different consequences satisfy values differently. Consumers need to be aware of their value preferences if they are to make decisions that result in the most desirable consequences for themselves or for the community as a whole.

THE ECONOMIC TOOLS FOR DECISION-MAKING

There are a number of economic concepts that are helpful in making individual decisions. Those primarily taken up in this section are economic wants, scarcity and choices, opportunity costs and trade-offs, marginalism, and equilibrium.

1-1

Wheels or No Wheels

TIME One class period

RECOMMENDED Grade level: 9–12

MAJOR CONCEPTS Scarcity and choice; opportunity costs; trade-offs

RELATED CONCEPTS Negative externalities

INSTRUCTIONAL OBJECTIVES Students will

1 Use the decision-making matrix to reach a decision about transportation;

2 Apply personal and social values in reaching a personal consumption decision;

3 Give examples of negative externalities and explain how a personal marketplace decision may affect international trade.

RATIONALE An understanding of the decision-making process is fundamental to rational choice-making. For some consumer decisions, such as those concerning transportation, many individuals only consider their own personal values and preferences. In this activity, students are asked to make a transportation decision that takes into consideration social as well as personal costs and benefits. The social costs and benefits relate to negative externalities and issues in international trade.

MATERIALS Handouts 1-1A and 1-1B.

PROCEDURE

1 Ask students what criteria they or their friends or relatives have used in purchasing or using different forms of transportation. (Examples of criteria they may suggest include: safety, convenience, comfort, cost, time. etc.)

2 Distribute Handout 1-1A for students to read. (In some classes you might want the students to role-play the situation outlined in the handout.)

3 After students have read Handout 1-1A, distribute Handout 1-1B, which contains a blank form (or grid) for students to fill out as an aid in carrying out the decision-making process. Work with students to help them select the elements needed to complete the first three steps outlined in the handout. Have students:

(NOTE: An example of a completed grid appears on page 6. You may wish to project it or otherwise display it to the class. An alternative is to draw a grid on the chalkboard and fill it in as the class discussion moves forward through the criteria and alternatives. Answers will vary according to the social values of the students and the situations they have encountered in the marketplace.)

a State the problem.

b List the three alternatives.

c Determine which criteria to use in order to evaluate the alternatives as well as categorize the criteria according to whether they are personal or social. Examples of personal criteria suggested in the reading include comfort, convenience, freedom, effect on college fund, and safety; examples of other criteria which are not mentioned are "use in all kinds of weather" and "ability to give friends rides." The social criteria mentioned in the reading are "degree of pollution," "responsibility of being a safe driver," and "effect on the creation of American jobs." Use questions such as the following to generate discussion of these and other social criteria suggested by students.

- *Why are people, such as sister Jenny, concerned about the pollution aspects?* (Because of the effect that pollution has on the air that she and others breathe. Too much pollution causes health problems for some people, which may also involve increased medical costs and time off from work because of illness. Too much pollution also causes premature deterioration of vehicles, buildings, etc., which increases costs for the owners. Pollution is an example of a social cost, that is, a cost borne by people who are not involved in the original transaction. Pollution as a social cost is called a negative externality by economists.* You might want to take some time

* Externalities are the positive or negative side effects that result when the production or consumption of a good or service affects the welfare of people who are not the parties directly involved in a

to explain this concept and to discuss other forms of negative externality, such as water pollution, noise pollution (blaring stereos), untended vacant lots or buildings.)

- *Why was Jane's dad concerned about safety?* (Because teenagers have more accidents than other age groups and therefore are a greater risk, not only to themselves, but to the general driving public. They thus add to their own costs those that are imposed on others, i.e., social costs. These costs may be financial — e.g., medical bills, pay lost because of absence from work — or they may take other forms such as personal suffering and inconveniences borne by the victim's family.

  Dad's concern about motorcycle safety relates to similar matters. Motorcyclists are a greater risk to themselves and to other motorists simply because they are not as adequately protected as drivers of cars and are therefore prone to greater injury in an accident.

  Dad's point about the mechanical reliability of a used car also implies a possible social cost in the event that the car causes a hazard on the road, creates more pollutants, or is noisy.)

- *Why was Jane's mother concerned about her buying a foreign-made motorcycle?* (By buying a foreign-made motorcycle instead of an American-made one, Jane's purchase would encourage foreign rather than American production of motorcycles.)

- *If the foreign-made cycle Jane is considering is the best quality cycle at a given price, how may the purchase be advantageous to her personally?* (She would be getting the best buy for her money.)

- *If many consumers choose foreign-made motorcycles instead of American-made ones, what effect will this have on the American motorcycle industry in the short and long run? What changes might one see in the American economy as a whole as a result of developments in the cycle industry?* (Because of lower demand for American-made motorcycles, American producers in the short run will decrease production, which will mean fewer jobs for American motorcycle workers, less extensive use of American production facilities, and diminished profits for the cycle manufacturers. In the long run, if they are to regain their business, American firms will be forced to make a cycle that is more competitive in the marketplace. This assumes that no increased trade barriers, such as tariffs and quotas, are put on imports of foreign-made motorcycles. If American companies are unable to produce a cycle that can compete with imports, they will discontinue producing cycles. As a result, resources will be freed to produce other goods and services in which American businesses can successfully compete with foreign producers and thus increase the export of these goods and services. In fact, the increased exports are likely to be purchased with the extra dollars that flow abroad through the increased sales of foreign-made motorcycles in the U.S. market. The result of the whole process is to allocate resources more efficiently, and people in both countries will be better off.)

4 Have students work to complete steps 4 and 5 of the handout by themselves.

5 Call on students to indicate what they determined as the best choice for Jane and why. Individual choices will vary because students will give different weightings to the criteria. In the discussion, make sure each student points out the opportunity cost of the choice. (The opportunity cost is the forgone benefit of the next best alternative when scarce resources are used for one purpose rather than another.)

6 Summary Activities:

a Ask students what they found most difficult in completing the grid. (Answers will vary.)

b Ask students whether they believe they should use the decision-making process for every choice they make. (They should consciously use the process in making choices. Often it can be done informally, that is, without paper and pencil. However, for major choices, such as an automobile purchase, a career decision, a housing decision, it is usually a good idea to perform a detailed written analysis to help clarify the issues.)

c Tell students: In this activity we considered both personal and social criteria. Ask: Do you

---

market exchange. A positive externality in consumption, for example, may result from the acquisition of additional education by an individual; when put to proper use, additional education increases the productivity of that individual, and society as a whole thereby benefits. A negative externality in consumption occurs when cigarette smoking by one individual has detrimental effects on nonsmokers. A positive externality in production occurs, for example, when a dam constructed to generate electric power provides flood control for downstream residents and/or creates an attractive lake for scenic and recreational purposes. A negative externality in production occurs when a factory discharges smoke or other pollutants into the air or into rivers and streams.

think social criteria should be considered in making personal marketplace decisions? Have you ever considered the possible effects on society when making a buying decision? Please give examples. (Answers will vary according to the social values of the students and the situations they have encountered in the marketplace.)

EVALUATION

a Assess the quality of student's contribution to class discussion.

b Review the quality of written responses to Handout 1-1B.

SAMPLE DECISION-MAKING GRID

ALTERNATIVES	CRITERIA						
	More Convenience	More Freedom	Effect on College Fund	Environmental Impact* (noise & air)	Overall Safety	Creation of New American Jobs* (short term)	No More Responsibility
Buy new motorcycle	+	+	–	– –	– –	–	–
Buy used car	+	+	– –	–	–	0	–
Buy no other vehicle	–	–	+	0	0	0	+

KEY: + = positive effect on criterion; – = negative effect on criterion; 0 = no effect on criterion.
*Outcome is affected by aggregate demand.

Handout 1-1A

CASE STUDY — WHEELS OR NO WHEELS

Name _____ Class _____

Jane is a senior in high school who has her driving license. She would like to get her own set of "wheels." She has enough money to purchase either a new foreign-made motorcycle or an old used car. She earns $50 a week working part time as a checkout cashier at a local grocery store. Up to now Jane has been saving $20 a week — most of which she has been saving to help pay for a college education. Currently, she gets to school by a school bus and then walks nine blocks to the grocery store after school. Her mother or father picks her up after work. She wants a car or motorcycle because of the freedom that it will provide in getting to school, to work, and to see friends.

In order to receive some additional thoughts on the subject, Jane tells her family that she's thinking about getting a car or cycle. Her sister, Jenny, doesn't think it's a good idea. Why spend all that money when you don't really need to? Jenny points out that Jane won't be able to save as much for college because of the added expense of operating the vehicle and the cost of insurance. She will also have to take money from her savings to pay for car or cycle. Both girls know their parents do not have much money to put toward a college education. Also, since each of her parents has a car, there has generally always been a car that Jane could use in the evening to visit friends. Jenny, who is active in environmental matters, is opposed to Jane's buying an old car because of its lack of pollution controls.

Dad's concern is about safety. He points out that teenagers are statistically more likely to have accidents with motorcycles than with cars. He asks Jane what kind of protection she will have against accidents or personal injury if she buys the cycle. He is also concerned about how safe mechanically a used car would be. Mom is opposed to Jane's buying a motorcycle because the one Jane likes is manufactured in another country. She said "your purchase will be making jobs for foreigners, not Americans. We certainly don't need that when we have so many unemployed workers."

Using the decision-making grid, determine what you think Jane should do. Be sure to look at all of the concerns mentioned. You may also think of other concerns.

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Handout 1-1B

DECISION-MAKING PROCESS

Name _____ Class _____

Step 1. State the problem _____

_____

Step 2. List the alternatives indicated in the case study (use grid below).

DECISION-MAKING GRID

ALTERNATIVES	CRITERIA						

Step 3. List the criteria stated by Jane and other members of her family. Add any other criteria you think appropriate, but that were not raised in the story _____

_____

Step 4. Evaluate each alternative in terms of each criteria. (Mark plus, minus, or zero signs in the appropriate boxes to indicate your assessment.) Are all your criteria of equal value? (YES *or* NO) _____ If not, you may give point values to each criterion by putting in more than one plus or minus in a box.

Step 5. Select the best choice for Jane _____

Explain why your choice would be the best one for her _____

_____

_____

_____

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

1-2

Let's Go for a Swim

TIME REQUIRED One class period

RECOMMENDED GRADE LEVEL 9–12

MAJOR CONCEPTS Competition; price mechanism; public goods and services; private goods and services; exclusion/nonexclusion

INSTRUCTIONAL OBJECTIVES Students will

1 Distinguish between a good and a service;

2 State why a user fee for a service may be different when the service is provided by businesses than when provided by public institutions;

3 Explain why public institutions provide some goods and services that businesses are willing and able to offer in the marketplace;

4 Describe how the exclusion principle operates when a user fee for a service is based on the cost of producing the service;

5 Determine, in a given situation, the trade-offs between the alternatives offered by the private and by the public sector.

RATIONALE American consumers, in general, have wide choices among specific goods and services offered by competing businesses in the marketplace. Some goods and services are available not only from businesses, but from nonprofit organizations and government as well. This activity presents students with a situation in which a choice can be made between securing a good or service from a government-operated source or a private source. The activity emphasizes the trade-offs involved in such choices.

MATERIALS A copy of Handout 1-2A for every student.

PROCEDURE

1 Ask students how many of them like to swim. Where do they do most of their swimming? Do they or their parents pay anything for the opportunity to swim at a particular place? How much do they pay? If the fees differ, ask for possible reasons why.

2 Provide each student with a copy of Handout 1-2A. Organize the class into small groups. Have students read the handout and then prepare answers to the questions as a group. Call on previously designated group recorders to present their answers; allow time for clarification and discussion.

3 If there is time, you may wish to present the following questions for discussion. Otherwise, proceed to step 4.

a Suppose that Sally could afford to build a pool in her backyard. Does this mean that she should necessarily choose this option?

b Do you think that Sally might think differently about building her own outdoor pool if she had a family with children instead of living alone or was frequently visited by many guests?

c Do you think Sally might think differently about building her own oudoor pool if she lived in Florida instead of Maine? What effect might such different locations have on Sally's views of the advantages and disadvantages of building a pool of her own?

4 After the class has worked through all the questions, summarize the activity by posing the following questions:

a What are some other items that businesses, private nonprofit institutions, and governments provide? (EXAMPLES: Private and public education, private and public golf courses, private and public parks.)

b Which of the sources, private or public, charges higher fees to the user for the goods and services named above? Why?

c Which of the sources excludes more people? Why?

d What are the differences between having goods or services provided by businesses or by a nonprofit or government organization?

EVALUATION

1 Assess the quality of student contributions to class discussion.

2 Assess the quality of student responses to the case study and the appended questions.

HANDOUT 1-2A: QUESTIONS AND ANSWERS

a *In which of the four instances would Sally be purchasing a service and in which instances would she be purchasing a good?* (The membership in the Community Center, local "Y," and sports club involves buying a service: use of a pool. In building her own outdoor pool, she would be purchasing a good.)

b *Why is the membership fee for the Community pool and "Y" so much less than for the private club?* (The Community pool and the "Y" receive a majority of their support from sources other than membership fees. The Community pool is supported by the public through the taxes it pays. The public makes voluntary contributions to support the "Y." The primary source of support for the sports club is probably the membership fees.)

c *What is the probable reason why the sports club is less crowded than the Community Center or the "Y" pool?* (The private sports club has a much higher annual fee. Many are excluded from using the private club because of their inability or unwillingness to pay the higher fee.)

d *Since businesses are willing to provide some recreational facilities, such as swimming pools, at a price, why do some public institutions nevertheless provide such facilities?* (Businesses generally charge users for the full cost of the facilities, including operating expenses. Those who cannot pay the fee are excluded. Many communities believe such recreational facilities should be available to all and so provide financing through taxation or contributions and thus are able to charge less than the full costs.)

e *If Sally pays the $10 membership to use the Community Center pool, is this the only payment she makes to support it?* (No, she pays local taxes, some of which go toward running the pool.)

f *If Sally chooses the Community Center pool option, would she probably be paying her full share of the costs of operating the pool, assuming she will frequently use it?* (Probably not, even considering the membership fee and the portion of her taxes that goes toward the pool. Many other taxpayers will help support the pool who will not be using it.)

g *In which of the four options would Sally be more likely to pay her full share of the user costs for operating the pool?* (Membership in the private club or by construction of a pool in her backyard.)

h *Why is the option of pool ownership more expensive than the other three options?* (If she owns the pool, she bears all of the costs, whereas the costs are shared in the other three options.)

i *What are the advantages and disadvantages of using the Community Center pool or the "Y"?* (Advantages: relatively low cost, no responsibility for upkeep and the safety measures, available year-round regardless of weather; disadvantages: lack of immediate accessibility because of distance, limitations on use because of crowdedness.)

j *What are the advantages and disadvantages of joining the private sports club?* (Advantages: lower cost than owning a pool, no responsibility for upkeep or safety, year-round availability regardless of weather, fewer limitations on use than "Y" and Community Center pool because private club is less crowded; disadvantages: more expensive than the "Y" or Community Center pool, lack of immediate accessibility compared to backyard pool.)

k *What are the advantages and disadvantages to Sally of building and maintaining her own outdoor pool?* (Advantages: accessible, private, uncrowded conditions; available for use to entertain guests; disadvantages: higher costs, more responsibility because of need to maintain pool and to provide safety measures for guests, limitation of use during inclement weather because the pool is outdoors.)

l *From an analysis of the advantages and disadvantages, what do you see as the primary trade-offs between choosing to join the sports club instead of the Community Center or "Y"?* (Less crowdedness and more privacy in exchange for more money.)

m *What are the primary trade-offs of building a pool in the backyard instead of joining the sports club?* (Greater accessibility, privacy, and control of pool in exchange for a much greater expenditure.)

n *What do you think Sally should do?* (Answers will vary according to values and goals of students.)

Handout 1-2A

LET'S GO FOR A SWIM

Name _____ Class _____

Sally is an unmarried, employed young woman who owns a home in Central City on which she pays taxes. Her house sits on a large lot. One of her main recreational interests is swimming. She finds it to be relaxing and a good way to get exercise. She is trying to determine how she can best pursue her swimming activities. She determines that the following options are available:

1 Use the indoor pool at the Community Center operated by the city government. Sally's income is such that she is expected to pay a $10 annual membership fee. The pool is financed primarily by local tax revenues. It is generally very crowded. The pool is 10 blocks from her home.

2 Use the indoor pool at the local "Y." At her level of income, Sally is expected to pay a $35 annual membership fee. The "Y" is a private, nonprofit organization which gets about 70 percent of its support for the pool from local contributions it receives in its annual fund drive. The pool is about 15 blocks from Sally's home and quite crowded.

3 Join a private sports club, which has a large indoor pool similar to those at the Community Center and the "Y." The sports club is a business owned by three members of the community. Annual membership fee is $400. The pool is generally not very crowded and is 12 blocks from home.

4 Build her own outdoor pool in the backyard. Initial cost for building an in-the-ground pool is estimated to be $10,000. The annual upkeep of the pool will be about $1,000 after taking into account depreciation, routine cleaning, increased insurance premiums on the property, and repairs of equipment. Other considerations in looking at this option might be: (1) if Sally takes the $10,000 out of her savings account she will lose the interest she has been earning; (b) if Sally borrows the money she will have to pay interest on the loan and repay the principal; (c) Sally's property tax will go up if the assessment on her property rises.

After reading the problem, answer the questions below:

a In which of the four instances would Sally be purchasing a service and in which instances would she be purchasing a good?

b Why is the membership fee for the Community Center pool and the "Y" so much less than for a private club?

c What is the probable reason why the sports club is less crowded than the Community Center or the "Y" pool?

d Since businesses are willing to provide recreational facilities, such as swimming pools, at a price, why do some public institutions nevertheless provide them?

e If Sally pays the $10 membership to use the Community Center pool, is this the only payment she makes to support it?

f If Sally chooses the Community Center pool option, would she probably be paying her full share of the costs of operating the pool, assuming she will frequently use it?

g In which of the four options would Sally be more likely to pay her full share of the user costs for operating the pool?

h Why is the option of pool ownership more expensive than the other three options?

i What are the advantages and disadvantages of using the Community Center or "Y" pool?

j What are the advantages and disadvantages of joining the private sports club?

k What are the advantages and disadvantages to Sally of building and maintaining her own outdoor pool?

l From an analysis of the advantages and disadvantages, what do you see as the primary trade-offs between choosing to join the sports club instead of the Community Center or the "Y"?

m What are the primary trade-offs of building a pool in the backyard instead of joining the sports club?

n What do you think Sally should do?

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1-3

What Are the Real Profits?

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVELS 9–10

MAJOR CONCEPTS Profits; economic incentives; return on productive resources; opportunity costs; investment

RELATED CONCEPTS Decision-making; price

INSTRUCTIONAL OBJECTIVES Students will

1 Define net profit and opportunity cost;

2 Calculate net profit and net profit minus opportunity cost;

3 Show how opportunity costs relate to profit;

4 Differentiate between economic and non-economic incentives for owners of businesses.

RATIONALE Profits are the return a business receives after deducting all costs of production from the revenue derived from the sale of goods and services. Profit is the economic incentive that encourages entrepreneurs to enter the market. A lack of profit or an insufficient amount of profit is a major factor in the decision of a business to change its mode of operation or to leave a market. Profit is the major reason people enter and remain in business, but it is not the only one. A business can increase profit by raising income faster than costs, by reducing total costs of operation, or by doing both.

Net profit (or net earnings) is the difference between the total income or revenues of a business and its out-of-pocket costs of operation (explicit costs). Opportunity costs are what the business owner would have earned on the productive resources used in the business if these had been applied to an alternative use. Net profit minus opportunity cost gives a better indication of the economic desirability of the business.

MATERIALS One copy of Handouts 1-3A and 1-3B for each student.

PROCEDURE

1 Give each student a copy of Handout 1-3A. Have students work through the material individually or in groups. Answers to questions are:

JONES CARPET-CUT LAWN CARE SERVICE
Profit and Loss Statement

Gross income		$1,500.00
Operating expenses		
Selling expenses: advertising	$ 10.00	
General expenses:		
Maintenance and repair	50.00	
Fuel	160.00	
Depreciation	180.00	
Total operating expenses: selling expenses plus general expenses		*400.00*
Net profit or earnings		*$1,100.00*

a *At first glance do you believe Jim Jones has obtained a good return on this venture?* (Most students will probably think at first that Jim obtained an excellent return. With an investment of $1,000 in a mower that will last five years he is getting a return of $1,100 in the first year.)

b *How did Jim increase his productivity? Can you cite other instances in which workers increased their productivity in a similar way?* (Jim increased his productivity by buying a machine that uses less human energy to operate than his former machine and that enables him to cut more lawns in a given time. Industry is replete with examples of enterprises that raise their labor productivity by introducing more efficient capital goods. Substitution of a word processor for a typewriter, or an electric drill for a hand drill are among the numerous examples.)

c *What are the various inputs that Jim provided for this venture?* (Money to buy the mower, labor to run the machine, managerial talent to conduct the operation — including knowing when to sharpen blades and perform other necessary repair work.)

d *Does the net profit, or earnings, shown in the profit and loss statement for Jim's operation represent only the return for taking a risk?* (No, it also represents returns for other inputs that he provided for the venture, including the chief item — his labor.)

e *What must Jim do to determine whether he has actually made a good profit on this venture?* (Calculate what he could obtain as a return from the next best alternative for using his investment money and other resources.)

2 Give each student a copy of Handout 1-3B. Have them work through the case individually or in groups. Answers to questions are:

REVISED PROFIT AND LOSS STATEMENT WITH OPPORTUNITY COSTS INCLUDED

Net profit (or earnings)		$1,100.00
Forgone interest on investment	$110.00	
Forgone wages	800.00	
Total opportunity costs		$ *910.00*
Net profit (or earnings) less opportunity costs		$ *190.00*

a *Why is it a good idea for Jim to take into consideration the opportunity costs of using the resources in the lawn-mowing business in order to determine whether he is making a good profit?* (Such an analysis provides a comparison with which he can judge whether he is using his resources in the most efficient way.)

b *Suppose that Jim could have made $6 an hour working for Mr. Hoffer instead of $4 an hour. How would that change the figure for his net profit less the opportunity cost? How might this affect Jim's decision to continue the lawn-mowing business for another year?* (He would show a loss of $210. If Jim is primarily interested in using his resources most efficiently in order to get the highest return, he might be tempted to discontinue his lawn-mowing business. However, if he likes to work for himself and especially likes the lawn-mowing business he created, he might still want to continue the business even though he could receive a greater return by using his resources in another way.)

EVALUATION

1 Assess quality of responses to activities.

2 Have students do a similar profit analysis of a business they are involved in or of a school-operated function (e.g., snack stand at sports events, student club money-raising function, etc.).

3 Conduct a test in which students define the concepts in this lesson and complete a case study similar to the one provided.

Handout 1-3A

JONES CARPET-CUT LAWN SERVICE

Name _____ Class _____

Seventeen-year-old Jim Jones has neighbors for whom he mows lawns in the summer with a power mower that he must push. With a riding mower, he could mow two or three lawns in the time that it takes him to do one lawn with his current equipment. He wants to mow more lawns in order to make more money so that he can purchase an automobile. He decides to take $1,000 from his savings account to buy a riding mower.

At the end of the first summer of operation with the riding mower, he sat down to decide how his business was doing. Your job is to help him with this task.

He gathered the following data to determine his net profit or earnings, which is defined as total revenue minus out-of-pocket (explicit) costs. Complete the profit and loss statement to determine his net profit. After completing the profit and loss statement, answer the questions that follow it:

Income from lawns mowed	$1,500
Cost of lawn mower and accessories	1,000
Expenses	
Gasoline and oil	160
Blade sharpening and parts	50
Fliers	10
Annual depreciation (5-year life, salvage value = $100; $1,000 − $100 = $900; $900/5 = $180)	180

JONES CARPET-CUT LAWN CARE SERVICE
Profit and Loss Statement

Gross income		_____
Operating expenses		
Selling expenses: advertising	_____	
General expenses:		
Maintenance and repair	_____	
Fuel	_____	
Depreciation	_____	
Total operating expenses: selling expenses plus general expenses		_____
Net profits or earnings		_____

a At first glance, do you believe Jim Jones has obtained a good return on this venture?

b How did Jim increase his productivity? Can you cite other instances in which workers increased their productivity in a similar way?

c What are the various inputs that Jim provided for this venture?

d Does the net profit, or earnings, shown in the profit and loss statement for Jim's operation represent only the return for taking a risk?

e What must Jim do to determine whether he has actually made a good profit on this venture?

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Handout 1-3B

ANALYSIS OF THE JONES CARPET-CUT LAWN SERVICE

Name _____ Class _____

Jim was very pleased with his return. He showed the profit and loss statement to his father, who is an economist. His father recommended that Jim do some further analysis to determine whether he actually did make a good profit.

Mr. Smith indicated that it is indeed important to look at out-of-pocket explicit costs and subtract them from total revenue, as the completed profit and loss statement shows. But that is not enough. One should also look at opportunity costs which, in this case, are the returns that could be gained in employing one's resources in another use.

Jim wondered why he should be doing this. Mr. Smith indicated that a good manager of resources must always be aware of what is given up when using resources for one particular venture rather than the next best alternative(s). Mr. Smith asked, "If you don't do this, how do you know whether you are using resources in the most profitable manner." The money put into the business to buy the capital good (riding lawn mower), Jim's labor, and the management of the operation with the attendant risk that Jim assumed in starting the business are all resources. They could be used for something else. The opportunity costs associated with using the resources in the next best alternative should be considered in figuring out whether one has made a good profit.

Jim was puzzled as to how he could estimate his implicit costs or opportunity costs. After thinking about it for a while, Jim came up with the following data:

Forgone Interest. If Jim had not started the lawn mowing business, he would have left the $1,000 purchase price of the mower in a certificate of deposit that paid 11 percent simple interest for a year.

Forgone Wages. Jim had worked for Mr. Hoffer, a truck farmer, for the past two summers. Because of Jim's experience, Mr. Hoffer offered him a part-time job at the beginning of this summer to manage a team of workers at the farm at $4.00 an hour. Jim spent approximately 200 hours mowing lawns. He estimates that he probably would have worked about the same number of hours for Mr. Hoffer as he did mowing grass.

Forgone Return on Renting Out the Old Mower. In Jim's community, there was little demand for renting a mower from a third party, so there was actually no forgone return for this input.

Directions:

Considering the preceding factors, calculate a revised profit figure for Jim's lawn-mowing services. Then answer the questions that follow the revised statement:

REVISED PROFIT AND LOSS STATEMENT WITH OPPORTUNITY COSTS INCLUDED

Net profit (or earnings)		_____
Forgone interest on investment	_____	
Forgone wages	_____	
Total opportunity costs		_____
Net profit (or earnings) less opportunity costs		_____

a Why is it a good idea for Jim to take into consideration the opportunity costs of using the resources in the lawn-mowing business in order to determine whether he is making a good profit?

b Suppose that Jim could have made $6 an hour working for Mr. Hoffer instead of $4 an hour. How would that change the figure for his net profit less the opportunity cost? How might this affect Jim's decision to continue the lawn-mowing business for another year?

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1-4

Two-Career Family: To Work or Not to Work?

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVELS 11–12

MAJOR CONCEPTS Scarcity; opportunity costs; investment in human capital; real costs vs. money costs

RELATED CONCEPTS Gross income; disposable income; net income; inflation; progressive tax

INSTRUCTIONAL OBJECTIVES Students will

1 Establish criteria for deciding whether or not to join the labor force;

2 Use the decision-making process to specify the trade-offs involved in joining or not joining the labor force;

3 Define human capital;

4 Determine the direct and indirect costs of investing in human capital.

RATIONALE More than half of all married women in the United States are in the labor force, and most have responsibilities not only as breadwinners but as homemakers and parents as well. The U.S. Bureau of Labor Statistics projects a further increase in the proportion of married women who are in the labor force. It seems likely, therefore, that most young women now enrolled in high school will face a decision about whether to enter or remain in the labor force if they decide to raise a family. It is important that this be an informed decision — one that takes into account both psychological and economic factors.

MATERIALS One copy of Handouts 1-4A and 1-4B for each student.

PROCEDURE

1 Introduce the activity with the following questions:

a If you marry, do you think both of you will work or just one of you?

b Do you think both of you may work if you have children? Why?

c What advantages and disadvantages does a two-wage-earner family with children have over a family with children in which one parent is a wage earner and the other parent stays at home?

2 Distribute Handout 1-4A. Have students role play and/or read Part I of the handout. Then have them answer the questions below.

a *Why has the salary for Mary's former job risen to $11,000 from the $7,200 of three years ago?* (General inflation; greater demand for secretaries relative to supply, which increases wage rates; above-average amount offered by employer to entice Mary to return to work.)

b *What did the Browns give up when Mary quit work to have Billy?* (Income, psychological benefits Mary gained from working outside home, opportunity for Mary to gain added experience on job which could lead to career advancement.)

c *What is their problem?* (What should Mary do?)

d *What are the alternative solutions?* (Stay at home, work full-time, become a part-time student.)

e *What criteria might John and Mary use in evaluating the alternative solutions?* (Psychological needs, more immediate spendable income, time with children, higher future income, family approval.)

f *What additional financial data are needed to evaluate the alternatives more completely?* (Actual increase in family income from Mary's job after expenses and taxes, costs incurred because of Mary's schooling.)

3 Have the students read Part II of Handout 1-4A and complete each of the worksheets (completed worksheets appear on page 18). Go over the answers with the class. Then pose the following questions for discussion:

a *Why should the income forgone be looked upon as a cost of going to school?* (It is the net income Mary could earn if she did not go to school and took the paid job instead.)

b *The schooling that Mary might pursue is an investment in her future. Economists call this an investment in human capital. Why is this an in-*

vestment for the Brown family? (Because the schooling will deliver returns — income — in the future. Their hope is that her earnings level will be high enough to enable them to repay their investment cost as well as earn a good return on their investment throughout her working years.)

c *Does more schooling always guarantee higher wages?* (Not necessarily. The value of schooling varies for different people and different occupations. Generally, though, those with more education have a higher earnings potential than those with less education.)

d *Would the Browns be taking any risks in pursuing the part-time-schooling option?* (The job market for medical technologists may be filled by the time she graduates, thus making it difficult for her to find a job. She might not complete the course of study because of illness, illness of her husband or children, dislike of the program, etc.)

e *Having a parent at home with children full time while they are young is seen by many as an important investment in the children's future (investment in human capital). Why might this be true?* (Many parents believe the security and the informal educational experiences they can provide are of better quality than what outsiders can provide. With this foundation, these parents believe their children can better develop their potential.)

f *How can one estimate the amount in terms of dollars that it will cost the family unit to have one parent stay home full time? Would the amount vary for different family units?* (One can estimate this by the amount of net income that the parent could earn in the labor market. It varies from family to family because earnings and additional expenses differ from household to household. For example, the cost of having medical doctors stay home to care for their children is a great deal higher than the cost of having teachers do so because doctors earn so much more than teachers.)

4 Distribute Handout 1-4B and have students work through it, using the alternatives and criteria developed earlier in the lesson. (A completed grid appears on page 18.)

5 Ask individual students to state their decisions and the reasons for their choice. Also ask the following questions:

a *If Mary's actual net income from the job came to only $1,000, would this affect your decision to have her work full time?* (Depends on weighting given to different criteria. If psychological need to spend time outside home or opportunity for career advancement is most important, decision may not change. If additional money is most important criterion, the $1,000 may not be enough of an incentive.)

b *Cite an example of a trade-off in choosing one option over another. (Answers will vary according to options chosen.)*

c *If Mary works full time, how could the Joneses cut back on her expenses and increase the family's net income? What are the trade-offs in making these changes?* (Redefining responsibility for household tasks of parents in order to cut down need for paid help. Trade-offs are the extra energy needed to perform such tasks and the decrease in leisure time that one or both parents must endure in exchange for more income.)

d *In what respect does going to school part-time provide an in-between option for the Browns — that is, between staying at home or working full time?*(Provides time for Mary to pursue personal interests outside at home but still spend a good part of the day with children.)

e *If Mary goes to work full time, how might it affect her willingness to comparison shop for food or to fix meals from scratch as she did when she worked as a full-time homemaker?* (Because of decreased amount of time for household chores, she might do less than before. Studies show that two-income families use more convenience foods and eat out more often. The reason for this is that time becomes relatively scarcer than money.)

f *If Mary or John felt very worried about leaving the children with others, how might that affect her decision to work full time?* (This criterion may be so important to them as to outweigh the benefits of her working full time.)

g *If the starting medical technologist position paid $10,000 instead of $14,000, would that affect the decision to have Mary go to school part-time?* (Depends. If Mary has a strong interest in becoming a medical technologist, she might want to prepare for that occupation, regardless of the salary. If the Browns are primarily looking at the return of their investment in Mary's education, the occupation of medical technologist does not initially compare very well with the secretarial position. The latter pays more and requires no additional educational costs. Yet, the Browns should also look at the potential for promotion. If advancement opportunities are

greater for a medical technologist than for a secretary, the long-term benefits of becoming a medical technologist would be greater — perhaps considerably greater.)

EVALUATION Assess the quality of discussion.

ANSWER SHEETS FOR HANDOUT 1-4B, PART II

Worksheet 1

Mary's yearly salary		$11,000
Income tax withheld	$1,300	
Social security	737	
Additional income tax	600	
Total taxes	2,637	
Disposable income		*$ 8,363*
Expenses (except taxes)		
Child care expenses	$1,500	
Bus transportation (50 weeks)	250	
Clothing	500	
Mary's lunch (50 weeks)	500	
Household help (50 weeks)	1,200	
Total expenses		*$ 3,950*
Actual net income from job		*$ 4,413*

Worksheet 2

Tuition for the year	$1,000
Child care expenses	900
Books	200
Transportation (50 weeks)	250
Interest on loan	100
Total direct costs	2,450
Income lost from not working (indirect)	4,413
Total costs (direct and indirect)	$6,863

SAMPLE DECISION-MAKING GRID

ALTERNATIVES	CRITERIA				
	Psychological Needs to Be Met	Time with Children	Immediate Spendable Income	Earnings Potential in Future	Family Approval
Stay home	–	+	–	–	+
Work full time	+	– –	+	+	– –
Part-time student	+	–	–	+ +	–

KEY: + = positive effect on criterion; – = negative effect on criterion; 0 = no effect on criterion.

Handout 1-4A

DOES IT PAY FOR BOTH PARENTS TO WORK?

Name _____ Class _____

Part I: Case Study

Mary and John Brown have been married five years and have two children: Billy, 3 years old, and Cindy, 1½ years old. John earns $17,000 a year. Mary worked as a secretary before Billy was born, earning $7,200 a year. Her former boss would like her to return to her old job at a salary of $11,000. Mary is delighted with the prospect of returning to work. She misses her friends and wishes she could get out of the house more often although she enjoys being with the children.

John would prefer that she take a medical technology program at a local community college on a part-time basis. Mary is interested. She could finish the program in four years. Starting salary for graduates of that program currently is $14,000. By the time she graduates, both children would be in school and therefore require less home supervision.

Mary and John have many goals, including buying a home and new furniture. It also seems they barely meet their financial needs on John's salary. At the same time both are somewhat concerned about Mary's not remaining at home. Mary wonders whether she will be satisfied with how well the household chores are done even if John takes on more of them or if they hire outside help. Both parents also wonder if the children will feel as secure and happy. They also know that neither John's nor Mary's parents would approve of both parents working outside the home while the children are below school age.

Part II: What Should Mary Do?

GAINS AND EXPENSES OF PAID WORK

Mary gathered information needed to make the decision. She found that the day care center that met her criteria would cost $1,500 a year for Billy and Cindy. If she took the secretarial job, she would have to pay $1,300 in state and federal income taxes and $737 in Social Security taxes. These taxes would be withheld from her paycheck. John pointed out that they would have to pay $600 in additional income tax because her salary would put the family in a higher tax bracket. Mary also estimated that she would need $500 in new clothes, $2 a day for lunch, and $1 a day for bus fare. She also intends to hire household help for four hours a week; she expects that this will cost her about $6 an hour including taxes and insurance.

Would it pay Mary to work? To help answer the question, complete Worksheet 1 on the second page of this handout, using the data in the preceding paragraph. After you complete the worksheet, read the paragraph below and then complete Worksheet 2 on the second page.

GAINS AND EXPENSES OF SCHOOLING

Mary also gathered data on the cost of schooling. She found that the tuition for a year would be approximately $1,000, with books about $200 extra. The day care center where she would place the children would cost about $900 a year for half days. She will eat at home. She will need the car so John will have to ride the bus to work for $1.00 a day. If she decides to go to school they will have to borrow $2,000 from a friend who will charge an annual interest rate of 5 percent.

Continued

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

WORKSHEET 1 Gains and Expenses of Paid Work

Mary's yearly salary		_____
Income tax withheld	_____	
Social security	_____	
Additional income tax	_____	
Total taxes		_____
Disposable income		_____
Expenses (except taxes)		
Child care expenses	_____	
Bus transportation (50 weeks)	_____	
Clothing	_____	
Mary's lunch (50 weeks)	_____	
Household help (50 weeks)	_____	
Total expenses		_____
Actual net income from job		_____

WORKSHEET 2 Costs for Mary's Schooling for One Year

Tuition for the year	_____
Child care expenses	_____
Books	_____
Transportation (50 weeks)	_____
Interest on loan	_____
Total direct costs	_____
Income lost from not working (indirect)	_____
Total costs (direct and indirect)	_____

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Handout 1-4B

THE DECISION-MAKING PROCESS

Name _____ Class _____

Step 1. State the problem _____

_____

Step 2. List the alternatives indicated in the case study (use grid below.)

DECISION-MAKING GRID

ALTERNATIVES	CRITERIA						

Step 3. List the criteria stated by the various members of the family. Add any other criteria you think appropriate, but that were not raised in the case study.

Step 4. Evaluate the alternatives against the criteria. (Place plus, minus, or zero signs in the appropriate boxes to indicate your assessment.) Are all your criteria of equal value? (yes or no) . If not, you may give point values to each criterion by putting in more than one plus or minus in a box.

Step 5. Select the best choice for Mary _____

Explain why your choice would be the best one for her _____

_____

_____

_____

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

1-5

Who Does What? — a Household Dilemma

TIME REQUIRED One class period

RECOMMENDED GRADE LEVEL 9–12

MAJOR CONCEPTS Specialization; division of labor; absolute advantage; comparative advantage

RELATED CONCEPTS Scarcity and choices; opportunity costs and trade-offs; economic wants and resources; interdependence

INSTRUCTIONAL OBJECTIVES Students will

1 Define the concepts of specialization, division of labor, absolute advantage, and comparative advantage;

2 Apply those four concepts to the making of personal or family decisions.

RATIONALE Specialization and division of labor make it possible for producing units (individuals, families, businesses, and countries) to use their resources most efficiently. This lesson focuses primarily on helping students understand how they can — individually and as members of their families — most efficiently use their resources in order to obtain goods and services. Although comparative advantage usually is discussed in relation to international trade, the concept can also be employed when individuals and families want to determine (a) which members of their family can most efficiently produce particular goods and services desired by the family or (b) whether the family unit or an individual or group outside the family could more efficiently produce a desired good or service.

MATERIALS One copy of Handout 1-5A for each student.

PROCEDURE

1 To introduce the concepts of specialization and division of labor, ask students who provides them and their families with various goods and services, what goods and services they produce for themselves and others, and the reasons they trade for certain goods and services. Possible questions:

a *Who cuts your hair? Who fills your dental cavities? Who mills the flour used in your home in the form of bread, cakes, and cookies? Who provides you with telephone service?* (Most likely students will indicate that they or their families pay others to provide these goods and services.)

b *We've just mentioned some goods and servicees that you pay others to provide. What are some goods and services that you and your family produce for yourselves?* (Students might mention food preparation, car washing, lawn mowing, and vegetable growing.)

c *What goods and services do you and others in your family produce for others?* (Students will list goods and services related to their parents' occupations, their own part-time jobs, and their voluntary activities.)

d *Why do we pay others to provide goods and services for us rather than producing these goods and services ourselves?* (We do not have the time, skills, land, equipment, or interest to produce all the goods and services we want, and we can pay other people to produce them for us.)

e *Why do we produce certain goods and servicees for ourselves rather than pay someone else to produce them for us?* (We have the time, skills, land, equipment, or interest to produce these goods and services.)

f *What makes it possible for us to buy goods and services from others?* (We trade goods and services we produce for goods and services others produce — usually by means of money.)

2 State to the class that the trading of goods and services is possible because of specialization. Explain that no one can be totally self-sufficient. Some people produce certain goods and services and others produce different goods and services. Thus we have a division of labor. Specialization by division of labor usually takes one of four forms: (a) specialization by trade or profession, (b) specialization by stages of production, (c) specialization according to tasks, and (d) specialization according to geographic

location or climate. Ask students to give examples of each of these forms of specialization.

a *What are examples of specialization by trade or profession?* (Plumber, doctor, teacher, computer programmer, carpenter.)

b *What are examples of specialization by stage of production?* (In producing a car, steel workers smelt the steel, textile workers make the fabric, rubber workers make the tires, and so on.)

c *What are examples of specialization according to task?* (In producing a car, each worker performs only a small part of the assembly — one puts on gaskets, another fastens bolts, a third tests ignition, and so on.)

d *What are examples of specialization according to geographic location or climate?* (Coal or metal mining must occur where the materials are located; various agricultural products can only be grown on a large scale in areas with specific soil and weather conditions.)

e *In what ways does the division of labor operate in your family?* (Students might indicate that one person does the grocery shopping, another waters the plants, a third does the laundry, and so on.)

f *What are the benefits of specialization and division of labor?* (They permit scarce resources to be used most efficiently. Consumers benefit by having many more goods and services available than they can produce themselves.)

3 Explain that a family could use several methods to divide the household labor: draw straws, rotate tasks every so often, or have one person decide arbitrarily for all. A more rational way is demonstrated in the situation posed in Handout 1-5A.

4 Give a copy of Handout 1-5A to each student, and work through the handout with the class.

a *Who is more efficient (takes the least amount of time) at cleaning the apartment?* (Ted.)

b *Who is more efficient at doing the laundry?* (Ted.)

c *When a unit is more efficient at producing both of two goods or services, it is said to have an absolute advantage. Who — Pat or Ted — has an absolute advantage at performing both tasks? Explain.* (Ted. He can clean the apartment in less time than Pat can, and he can do the laundry in less time than Pat can.)

d *How many hours does it take Pat to do both tasks? How many hours does it take Ted?*

PAT	TED
6 hours for cleaning 5 hours for laundry	3 hours for cleaning 4 hours for laundry
11 hours for both tasks	7 hours total for both tasks

e *At which of the two tasks is Pat more efficient relative to Ted?* (Laundry — she takes only one hour more than he.)

f *At which task is Ted more efficient relative to Pat?* (Cleaning the apartment — he takes three hours less than she.)

g Comparative advantage is the principle that *if one person (or country) can perform two tasks (or make two products) more efficiently than another, each person should perform the task at which he or she is relatively more efficient. Who has a comparative advantage in doing the laundry?* (Ted has a comparative advantage in cleaning the apartment. Pat has a comparative advantage in doing the laundry.)

h *How can both Pat and Ted benefit from dividing their tasks on the basis of comparative advantage?* (By each doing what he or she is more efficient at, they gain more time for other activities. If Pat does the laundry — spending 5 hours — she gains 6 hours a week more than if she did both tasks. And if Ted does the cleaning — spending 3 hours — he gains 4 hours more for other activities than if he did both jobs. Both Pat and Ted gain the most extra time for leisure activities — one of their goals — by doing only the tasks each is the more efficient at.

i *Under what circumstances would it make good economic sense for Pat and Ted to consider paying someone to do their cleaning and laundry?* (If they did not have the goal of saving money for something they want such as a vacation trip. Or if they could spend the time which would otherwise be spent on household work on a wage-earning activity that, after paying taxes on the wages, would at least cover the expenses of paying someone to clean and do laundry.)

j Explain the relationship between *division of household labor and family goals.* (How household labor is divided among family mem-

bers depends on what goals the family wants to achieve.)

k *In making a decision about who should do which task, we have considered who is more efficient at performing each. What other factors play a part in deciding what goods and services a person, business, or country should produce?* (Who produces the best quality good or service — as judged by the consumer — might be important. In a family situation, who enjoys doing each task might be a factor in the decision.)

EVALUATION Assessing the accuracy of student responses to the orally given questions and the questions on the handout.

Handout 1-5A

"COMPARED TO WHAT?"

Name _____ Class _____

Pat and Ted Smith are married, both 23 years old, and both employed 8 hours a day. They have found that two of their major household tasks are cleaning their apartment and doing the laundry (washing and ironing). Over a week's time, it takes Pat 6 hours to clean the apartment and 5 hours to do the laundry. It takes Ted 3 hours to clean and 4 hours do do the laundry.

a Who is more efficient (takes the least amount of time) at cleaning the apartment?_____

b Who is more efficient at doing the laundry?_____

c When a unit is more efficient at producing both of two goods or services, it is said to have an *absolute advantage*. Who — Pat or Ted — has an absolute advantage at performing both tasks? Explain.

Pat and Ted each have nonwork activities they enjoy. Pat especially likes to play racquetball, involve herself in local politics, and spend time with friends. Ted's favorite leisure activities are bicycling, fishing, and reading. Together Pat and Ted enjoy going to movies and traveling. In fact, they are trying to save money for a vacation trip next summer. They also want to divide their household work about evenly so that each has time to spend on leisure activities. Therefore, they think that it would not be best to have Ted do both the cleaning and laundry even though he is more efficient at both jobs. They are trying to decide who should do the cleaning and who should do the laundry.

d How many hours does it take Pat to do both tasks? How many hours does it take Ted?_____

e At which of the two tasks is Pat more efficient relative to Ted?_____

f At which task is Ted more efficient relative to Pat?_____

g *Comparative advantage* is the principle that if one person (or country) can perform two tasks (or make two products) more efficiently than another, each person should perform the task at which he or she is *relatively* more efficient. Does Pat or Ted have a comparative advantage in cleaning the apartment? Who has a comparative advantage in doing the laundry?_____

h How can both Pat and Ted benefit from dividing their tasks on the basis of comparative advantage?_____

_____

i Under what circumstances would it make good economic sense for Pat and Ted to consider paying someone to do their cleaning and laundry?_____

j Explain the relationship between division of household labor and family goals_____

k In making a decision about who should do which task, we have considered who is more efficient at performing each. What other factors play a part in deciding what goods and services a person, business, or country should produce?

_____

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1-6

The Economics of Household Production

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVEL 9–12

MAJOR CONCEPTS Factors of production; investment in human capital; investment in capital goods; division of labor; opportunity costs

INSTRUCTIONAL OBJECTIVES Students will

1 Name the resources in household units that are used to produce goods and services;

2 Analyze the trade-offs of substituting tools and equipment (i.e., capital goods) for human resources in the household unit;

3 Explain how education (investment in human capital) and division of labor can be used to assign household responsibilities;

4 Explain why money is not used in the production or consumption of goods and services in the household;

5 Use the direct and opportunity costs methods to make household decisions about the use of human resources.

MATERIALS One copy of Handouts 1-6A, 1-6B, 1-6C for each student.

RATIONALE A household unit is similar to a business because it has many resources — human resources including managerial skill, tools and equipment (capital goods resources), and natural resources — with which to provide itself with various goods and services. The household unit is dissimilar to a business because the latter seeks to maximize profit while the goal of the former is to use its available resources in order to maximize the satisfaction of its members.

The purpose of this lesson is to give students an understanding of the resource base of the household unit and of how to use that base effectively in order to maximize household satisfaction. Students should also learn that resource management in the household unit concerns more than the management of money.

PROCEDURE

1 Ask students what goods and services are produced in their homes by the family members and what actually is used — the inputs — to provide these goods and services. As the products are named, list them on the board. Examples might include:

GOOD OR SERVICE PRODUCED	INPUTS: GOOD OR SERVICE USED
Cooking a meal	Food, stove, labor to shop for food, labor to cook
Dishwashing	Soap and water, sink and dishwashing machine, labor to wash dishes or operate dishwasher
Home-grown vegetables	Land, seeds, tools to prepare and maintain plot, labor to plant, weed, and harvest
Entertainment	Games, television, radio, stereo

2 Point out that all the inputs can be placed into three categories: human resources (including management), tools or equipment, and natural resources. Go back to the list in step 1 and have students state the category to which each input belongs.

3 Why is money not used in the production or consumption of goods and services in a household? *(A household does not contain a market. Generally, members of a household do not exchange goods or services among themselves by the use of money or barter. Instead, a household operates on the basis of mutual assistance by taking account of each member's strengths and needs.)*

4 Point out that the family can benefit from division of labor: a task or series of tasks generally can be more efficiently completed if assigned to one person instead of many. With division of labor, a person can become especially skillful at one task or a related set of tasks. Also point out that all family units have human resources: the skills, knowledge, time, and personal energy that its members can devote to managing and carrying out household tasks. Indicate that responsibilities outside the home limit the amount of human resources that a family unit can devote to household tasks. Therefore, care is necessary in planning the use of the available human resources, as the case in Handout 1-6A demonstrates.

Distribute Handout 1-6A. Split the class into groups of five, each of which is to develop a plan for allocating the tasks listed in Table 1 of the handout. Have each group share its plan with the others, and then, if desirable, change its allocations, giving reasons for its reassignment of various tasks. Make sure that each group considered division of labor and the

availability of human capital in making its final allocations.

After each group has given its responses, ask the following questions:

a What limitations are there on the amount of human resources the Green family can devote to household responsibilities? *(Family members are not available to carry out household responsibilities when they attend school or are employed outside the home. Some family members, such as 6-year-old Steven, do not have the skills, knowledge, and physical capabilities to assume some of the household tasks. In addition, the family members want some time for leisure activities.)*

b What are the trade-offs for the Green family when Mrs. Green assumes a full-time job? *(More money flows into the household unit in exchange for less total available leisure time for the members of the family. The quality with which some household tasks are performed may also suffer unless the members who take up some of Mrs. Green's tasks become as skillful at doing them as she is.)*

5 Point out that another important factor of production for the household are tools or equipment it owns (i.e., capital goods). Distribute Handout 1-6B to the groups. Have each family group of five work on this problem and report its answers to the class. The answers to the questions are:

a 182.5 hours (365 days × 0.5 hour saved per day)

b $118 ($500 initial cost ÷ 6 years' use = $83; yearly cost of $83 plus $35 per year for electricity = $118)

c 65 cents (yearly cost of $118 ÷ 182.5 hours of work saved per year)

d Low, since 65 cents is well below the national minimum wage of $3.35 per hour (as of 1984)

e It gains more time for year-round leisure in exchange for one vacation

f Answers will vary

6 Distribute Handout 1-6C. Explain what is meant by the direct and by the opportunity costs involved in the problem for any students who don't understand the definitions after they read the first three paragraphs of the handout. Have the groups work through the questions. Then discuss the answers with the class as a whole. The answers to the questions are:

a Using the opportunity cost method, which involves comparing the earnings from outside jobs forgone in doing household work with the cost of hiring someone to do the same tasks, what is the most efficient way of assigning the household work on a dollar-and-cents basis? (Carrie or Tom should assume the household tasks since they earn less both per hour and for the total hours worked in a month than the amount the Greens would have to pay the houseworker. It would not be wise to have either Mr. or Mrs. Green work fewer hours on their outside jobs in order to assume more household responsibilities since both earn more per hour and per month from their jobs — after paying taxes and social security — than they would be required to pay a houseworker.)

b Why should the Greens use after-tax income instead of gross income when comparing Mrs. Green's opportunity cost to the direct cost? (The Greens will pay the houseworker out of their after-tax income, not their gross income.)

c What are some of the nonmonetary opportunity costs Carrie or Tom may incur if they do the household tasks instead of continuing to carry on as many activities outside the home as before? (Both of them will be giving up the opportunity to work for others and probably some independence because they will not be earning money. Carrie could be giving up some exercise time that she wants in addition to any status that accrues from her being on the basketball team.)

d What do you think the Green family should do? (Answers will vary depending on the views of each student.)

EVALUATION

1 Close the lesson by having students comment on the validity of the following statement. "The most important resource to be managed by the family is money."

2 Have students cite experiences in their own homes that illustrate the following principles:

a Division of labor

b Investment in human capital

c Substitution of capital goods for labor

d Use of the direct and opportunity cost methods to make household decisions

Handout 1-6A

THE GREEN FAMILY'S DILEMMA

Name _____ Class _____

Jack and Jane Green are the parents of three children: Carrie, age 16; Tom, age 14; and Steven, age 6. Mr. Green earns $18,000 a year. Mrs. Green earns $6,000 a year working part-time.

Mrs. Green's boss has asked her if she would consider working full-time at a salary of $12,000. Mrs. Green likes her job and would like to accept the offer. However, she is concerned about how she can work full time, complete all of her homemaking tasks, and still have a little time for some leisure activities.

The children as well as Mr. Green would like to have Mrs. Green work so that there will be more money in the family to purchase additional goods and services. The children and their father agree that if Mrs. Green works full time they will be more helpful in completing household tasks.

Mother likes the family's proposal. To help establish equity in the completion of household tasks, she takes a survey of each individual's present contribution. Table 1 summarizes her findings.

Table 1 Average Minutes per Day Each Family Member Does Household Work
(number of minutes)

Task	Mr. Green	Mrs. Green	Carrie	Tom	Steven
Meal prep. & clean-up	6	132	24	18	6
House, car & yard care	42	84	18	18	18
Clothing care	5	78	6	5	5
Family care — helping others in family unit	18	84	6	6	0
Marketing & management	24	60	18	18	6
Total	95	438	72	65	35

Directions: After reading the case, consider yourselves as being the Green family and decide how you would reallocate responsibilities in the Green family when Mrs. Green works full time. In reallocating duties, consider how you will take into account division of labor in the household as well as the human capital each member of the household possesses. Be prepared to justify your plan.

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Handout 1-6B

SHOULD THE GREENS GET AN AUTOMATIC DISHWASHER?

Name _____ Class _____

Some members of the Green family recommend that if the family purchased an automatic dishwasher, the amount of time spent on household work could be cut down and more time would be available for leisure. Carrie suggests that the family purchase a portable dishwasher with $500 of the extra money coming in because Mrs. Green is working full time. Tom figures that the machine will last for 6 years and that the additional electrical expense will only be $35 a year. He estimates that a washing machine will save an average of 30 minutes in labor time per day.

The parents are not in favor of the proposal because they want to use that same money for a family vacation. They say three children can provide the labor needed to do the dishes; thus they do not feel a need to spend money on a dishwasher. The children, though, are tired of spending so much time doing the dishes and would like the automatic dishwasher.

After finishing the above reading, answer the following questions:

a How much labor time per year would a dishwasher save the Green household? _____

b What is the estimated actual cost to the Green family of buying and operating the dishwasher in the first year?

_____

c What is the per hour cost of the dishwasher to the Green family? _____

d Do you think this hourly cost is high or low considering how much persons employed to wash dishes by hand earn?

_____

e What is the trade-off to the Green family if it purchases a dishwasher? _____

f Do you think the Green family should or not purchase a dishwasher? _____

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Handout 1-6C

CHANGES IN THE GREEN FAMILY

Name _____ Class _____

Carrie is studying the economic value of household production in school. She has learned that there are two types of costs one should consider when looking at the economic value of household responsibilities — direct cost and opportunity cost.

Direct cost is simply the actual expense of hiring someone to do a special job. The out-of-pocket expense of hiring a houseworker to clean a dwelling, wash the dishes, do the laundry, etc., is an example.

People who do their own housework incur an opportunity cost. Opportunity cost consists of the forgone ability to use the time spent doing housework for leisure or to pursue another job commensurate with one's ability, go to school, or pursue any other activity next best to doing housework.

After six months of the new assignment of tasks in the Green family unit, some developments occur which may well change the assignments. Mrs. Green has accepted a promotion in her employment, which increases her salary to $16,000 a year or $8.30 per hour. Because of deductions for income taxes and social security, she takes home $6.50 of the $8.30.

Carrie was successful in making the girls' basketball team, but she is finding the practice and games to be very time consuming. In addition, the time she is asked to spend on her baby-sitting job, which pays $1.50 an hour, has increased. She now averages 9 hours a week of baby sitting. Consequently, she is spending less than her assigned time on household tasks.

Tom also is having difficulty completing his assigned tasks because he has a newspaper route, and it takes him one and a half hours each day to deliver the paper. Tom must make deliveries every day of the week and earns $90 a month ($2.00 per hour) by doing so.

Tom and Carrie would like to be relieved of doing some of their household tasks. They recommend that someone be hired to come in each week to do 6 hours of general household work (cleaning, dishes, laundering, etc.). The Greens would have to pay $5.50 an hour to such a person, which includes the social security taxes they must pay as employers.

Answer the following questions to determine what you think the Green family should do:

a Using the opportunity cost method, which involves comparing the earnings from outside jobs forgone in doing household work with the cost of hiring someone to do the same tasks, what is the most efficient way of assigning the household work on a dollar and cents basis? _____

_____

b Why should the Greens use after-tax income instead of gross income when comparing Mrs. Green's opportunity cost to the direct cost? _____

_____

c What are some nonmonetary opportunity costs Carrie or Tom may incur if they do the household tasks instead of continuing to carry on as many activities outside the home as before? _____

_____

d What do you think the Green family should do? _____

_____

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2

FUNCTIONING OF A MARKET

INTRODUCTION

Whether economic decisions are made by an individual or by society as a whole, they generally concern the basic economic problem of determining how limited resources should be allocated among alternative uses. This problem entails questions about what should be produced, how it should be produced (what materials, methods, and processes should be used), and to whom products should be distributed and in what proportions.

In modern societies, these decisions are subject to constant changes. In the United States and other Western democracies, they are made by most members of society rather than just a few. The principal mechanism for making and carrying out these decisions is the *market*. Although the United States has a mixed economy in which more than one process is used to make economic decisions, decentralized decision-making in the market system predominates.

Most secondary school students already participate in the decision-making that occurs in the marketplace because they spend money in it, or hold jobs, or both. Those who are students now will be participating in such decision-making throughout their lives. Consequently, it is important that students understand how the market system works, the economic principles and values upon which it is based, its strengths and weaknesses, and the individual and social consequences of alternative economic decisions and actions.

ASSUMPTIONS UNDERLYING MARKETS

Markets are institutional arrangements that enable buyers and sellers to exchange goods and services. Exchange may be defined as the process by which goods and services are bought and sold for money or credit, or are bartered for other goods and services. Economists believe that people agree to make an exchange or a trade because both parties perceive themselves to be better off as a consequence.

A market does not need to have a single physical location. Some markets, such as the New York Stock Exchange or the Chicago Board of Trade, do have a physical location that people can see or visit. Other markets, such as the market for high school teachers or the market for new homes, however, do not have a specific location. Such markets function through advertisements, letters, telephone calls, computer networks, personal relationships, and face-to-face discussions in various places. A "market" can be said to exist so long as there are some arrangements that enable potential buyers and sellers to communicate about the exchange of goods and services.

Economic incentive provides the motive for exchange. People engage in exchange because they have more of some products than they want and not enough of other products. When money or credit is used in an exchange, keeping the money or credit is deemed less desirable than acquiring the goods or services bought. The economic incentive for consumers in such exchanges is *utility*, or the satisfaction of wants. For those who work, the economic incentive is also utility, but in the form of wages. For those who own their own businesses, the incentive is utility in the form of wages for the work they do and in the form of profit in return for whatever they have invested in the business. A more general term that includes both wages and profits is "earnings."

In general, the view of human nature embodied in the assumptions surrounding the concepts of markets and economic incentives is that people's self-interests guide their economic behavior. This view implies that producers or sellers will continue to engage in providing a good or service as long as they are able to provide it and can realize acceptable earnings in doing so. Likewise, buyers will purchase goods or services if they can afford the purchases and the purchases satisfy their wants by providing sufficient utility in relation to their other possible purchases.

It can readily be seen that individuals who have little to exchange will have limited ability to participate in the marketplace. Conversely, individuals who have a great deal to exchange have greater than average ability to participate in the market. Moreover, individuals who offer goods or services that others perceive as having high utility will gain more in the marketplace than those who offer goods or services perceived to have low utility.

Consumers can improve their ability to participate in the marketplace by increasing the range or depth of their job skills, by holding extra jobs, or by finding other ways to increase their money income (e.g., by earning interest on their savings). Producers may improve their ability to participate in the market by increasing their production, lowering their costs, or producing a more highly desired good or service.

Since economic incentives motivate exchanges in the marketplace, it is expected that in any given exchange, producers or sellers will try to maximize earnings and consumers will try to maximize utility. Producers or sellers might attempt to maximize earnings by, e.g., selling at the highest possible price and/or by cutting their costs of production. Consumers might try to maximize utility by e.g., purchasing at the lowest possible price, getting more quality for a given price.

MARKET CHARACTERISTICS

Understanding the characteristics of different markets enables both producers and consumers to use the best method to obtain a desired level of utility, profit, or participation in a given market.

Market structure refers to the degree of competition in a particular market. *Competition* refers to the struggle among producers to sell goods and services to consumers as well as to hire workers in the labor market; to the struggle among workers to sell their services to employers; to the struggle among consumers to obtain as much of a good or service as possible at the lowest possible price. *Pure competition* exists in a market when there are many sellers and buyers, neither sellers nor buyers can control price, products are homogeneous, trading is open, there is a single market price for the commodity or service, there is perfect mobility of resources, and there is perfect knowledge of the prices of given quantities and given qualities. Since pure competition does not exist in most markets, markets can be characterized along a continuum from purely competitive to noncompetitive to the extent that the above conditions are or are not met. The opposite of pure competition is *monopoly*—a condition in which there is one producer of a commodity or service with complete control over price or the quantity supplied and in which no close substitute commodities or services are available. The continuum of markets in the United States has many more markets that fall between pure competition and monopoly than at either extreme.

Government regulation also affects markets. It does so by controlling the labeling of goods or services, the conditions under which goods or services may be offered (e.g., alcoholic beverages, restaurant meals), the manner in which they are produced (e.g., the purity of food and drugs), the prices at which certain monopolies can sell (e.g., public utilities), etc.

PRICE, SUPPLY, AND DEMAND

In the exchange process, whatever a good or service can command in exchange can be said to be the exchange value of the item. One aspect of that value represents the anticipated utility of the item in the eyes of the buyer. Other aspects that affect the exchange value of a commodity or service are the amounts and prices at which it is available on the market, the number of buyers that want the item and the quantities they want, and what the item costs to produce. **Price** is the exchange value of one unit of an item expressed in money. Price determines what sellers can receive and how much they can sell as well as how much buyers will buy and in what amounts.

The combined decisions of buyers and sellers of goods and services in a market determine the total demand and total supply of particular goods and services at any given price. Thus, the interaction of supply and demand determines the *market price*, i.e., the price at which buyers are willing and able to buy the same quantity of a good or service as sellers are willing and able to sell.

EFFECTIVENESS OF MARKETS

If the market allocates resources effectively, those resources are used most efficiently. The most efficient producers, those who can produce the highest quality and quantity for the least cost, are those who offer goods and services to the market and are still able to earn profit that enables them to continue producing. Market prices allocate what is produced to the purchasers able and willing to buy at those prices. Thus, all consumers and producers help decide what will be produced and at what price it will be sold. However, for a number of reasons, the market mechanism sometimes does not completely succeed in fulfilling its intended function.

One reason may be lack of information. Consumers who are not knowledgeable about product quality or are unfamiliar with the alternative products available may continue to demand a product that is not best for their purposes or whose price is higher than they need pay. These shortcomings result in inefficient resource use. Producers who lack knowledge about the demand for a product or the extent of competition in a market may use resources inefficiently by producing products for which there is insufficient demand. Workers may be unaware of job opportunities in other markets and, as a result, may remain unemployed or engage in work that does not make maximum use of their skills.

Markets also fail to operate efficiently because of a lack of mobility of resources. In a free-market economy, if the demand for an item decreases, the production of that item will eventually decrease as well. This, in turn, frees productive resources for use in producing other goods or services that are in demand. But sometimes freed resources are not imme-

diately used to produce other goods or services. For example, as our steel and auto industries shrank in the late 1970s and early 1980s, much of the idle plant and machinery could not be moved into new uses and many of the laid-off workers did not succeed in finding new jobs or took a long time to do so.

Markets are constantly changing. Demand and supply conditions may change. The tastes of buyers may alter — permanently or as fashions come and go. Research and more advanced production techniques may bring forth altered products, products previously unknown, or better products. Weather conditions affect some markets. And government actions with respect to fiscal and monetary policies, the regulation of markets, the amount of education provided to citizens, and many other factors also affect markets.

The lesson plans in this section deal with some of the concepts discussed above, especially in relationship to the interdependence of markets, the cost of information searches, the consumer price index, and the elasticity of demand.

2-1

Interdependence in the Marketplace

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVEL 8–12

MAJOR CONCEPTS Interdependence; productive resources; economic wants

INSTRUCTIONAL OBJECTIVES Students will explain how production in all but the most primitive economies involves a great deal of economic interdependence.

RATIONALE In an economy based on specialization and exchange, various industries or firms are extremely dependent upon one another to produce needed goods and services. Consumer decisions about purchases of goods and services affect a chain of producers and, ultimately, also affect other consumers.

MATERIALS One copy of Handouts 2-1A, 2-1B, and 2-1C for each student.

PROCEDURE

1 Give each student a copy of Handout 2-1A and conduct a discussion of Item 1.

2 Divide students into small groups. Have the groups complete the six diagrams in Item 2 of the handout. Have groups report their results and discuss the completed diagrams with the class. Call attention to the number of producers of goods and services who are affected by purchasing decisions for a single product. (NOTE: To reduce the amount of time spent on this portion of the lesson, have each group of students work with only one of the diagrams.)

3 Distribute Handout 2-1B. Have the class read the explanation in the handout and examine the diagram. Discuss the diagram and again point out the far-reaching effect of purchasing decisions.

4 Distribute Handout 2-1C. Divide class into small groups (or maintain the groupings established earlier in this lesson). Have them complete the diagram in the handout. (NOTE: To reduce the amount of time spent on this portion of the lesson, omit two of the five secondary-effect circles. To increase interest in the activity, have the groups deal with a good or service of their own choosing instead of the good — roller skates — named in the handout.)

5 Discuss the interdependence of markets in general and its implications for consumers, producers, and workers.

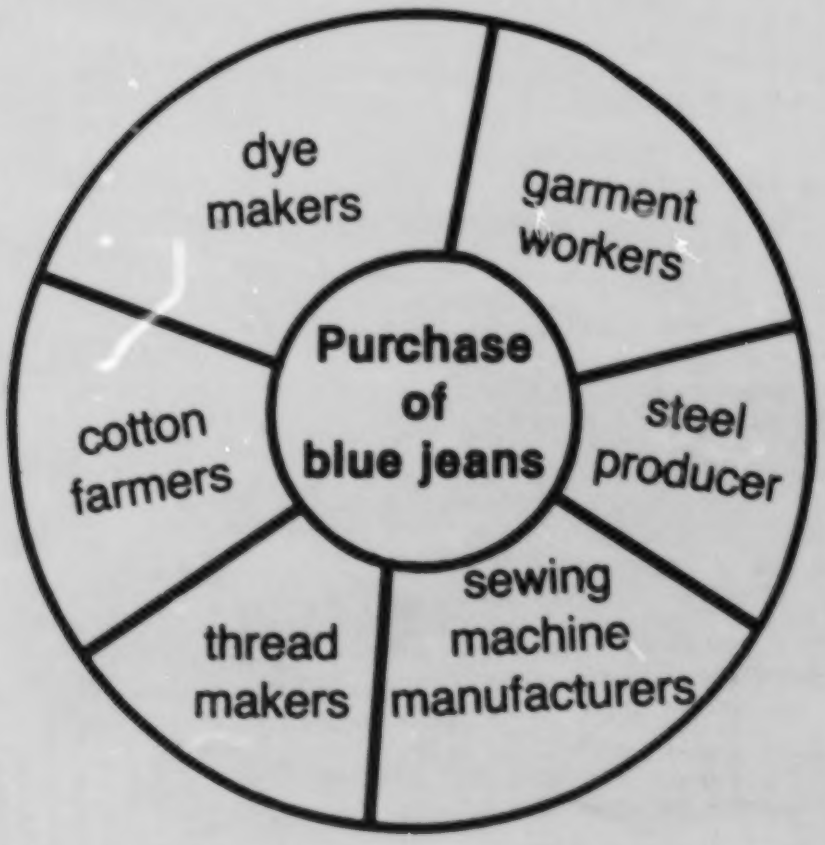
EVALUATION Have individual students draw a diagram like that in Handout 2-1C for an item they have recently purchased. OPTIONAL: Have the students write a paragraph concerning the interrelationships shown or implied in their own diagrams.

Handout 2-1A

RIPPLE EFFECTS IN THE MARKETPLACE — I

Name _____ Class _____

1 When consumers purchase items in the marketplace, they are buying whatever goods and services were needed to produce the item and make it available. Consequently, when consumers buy something (or decide not to buy it) their decisions affect the indirect producers as well as the direct producers of the item. The diagram below illustrates this point.



Continued

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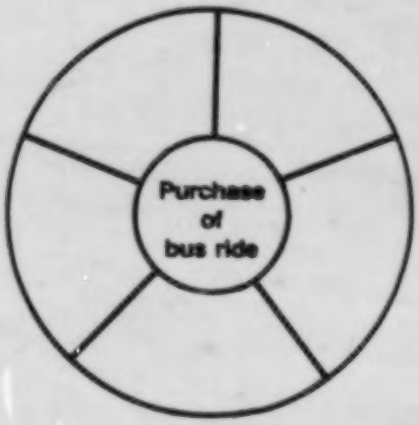
Handout 2-1A (concluded)

2 In each diagram below, fill in the outer blank segments with the names of producers of goods and services who are affected by the purchase of the item named in the center.



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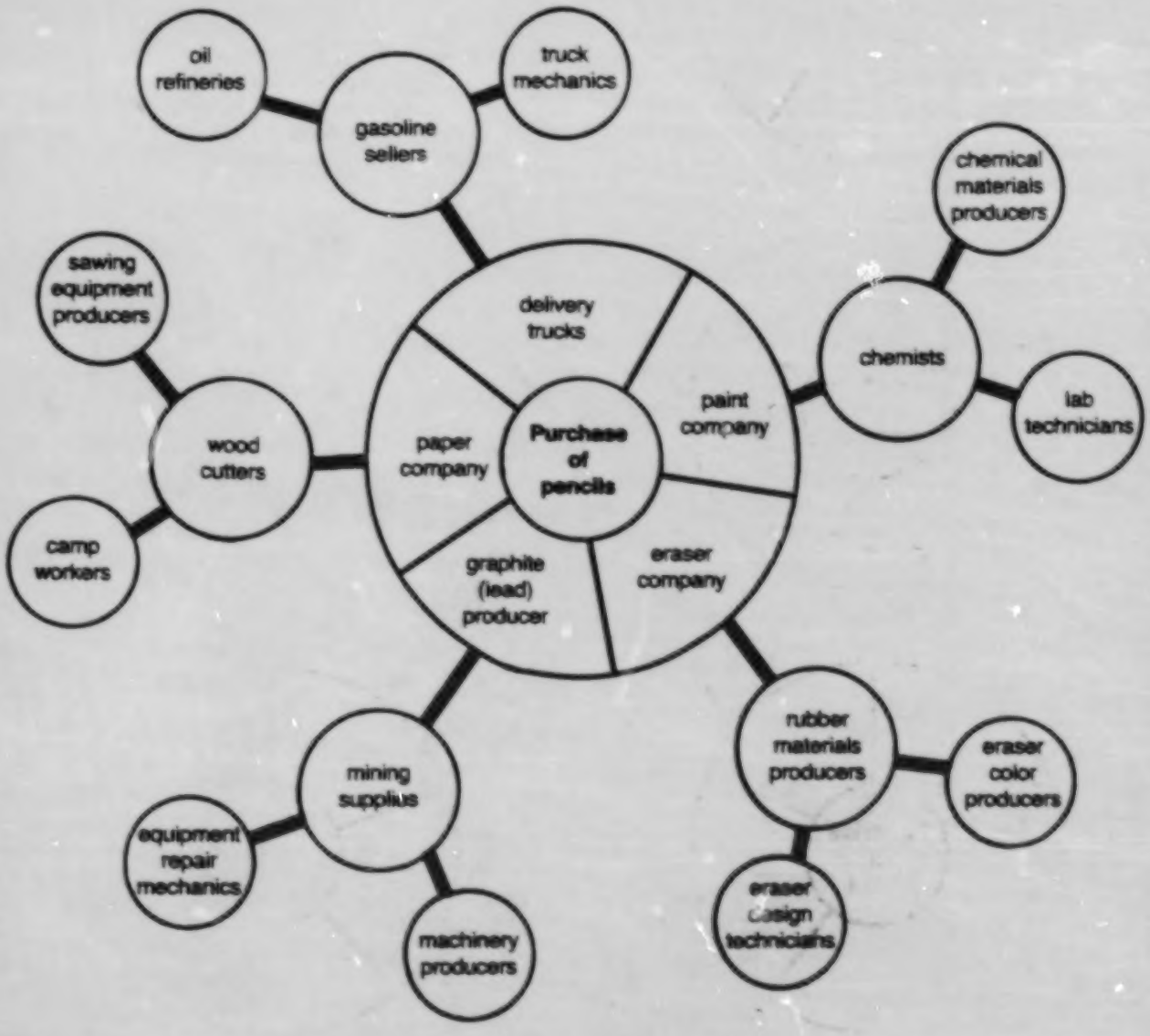
Handout 2-1B

RIPPLE EFFECTS IN THE MARKETPLACE — II

Name _____ Class _____

The examples in Handout 2-1A illustrate interdependence in a very simple way. The network of interdependence for most items is actually much larger, more complex, and more indirect. The diagram below illustrates this network.



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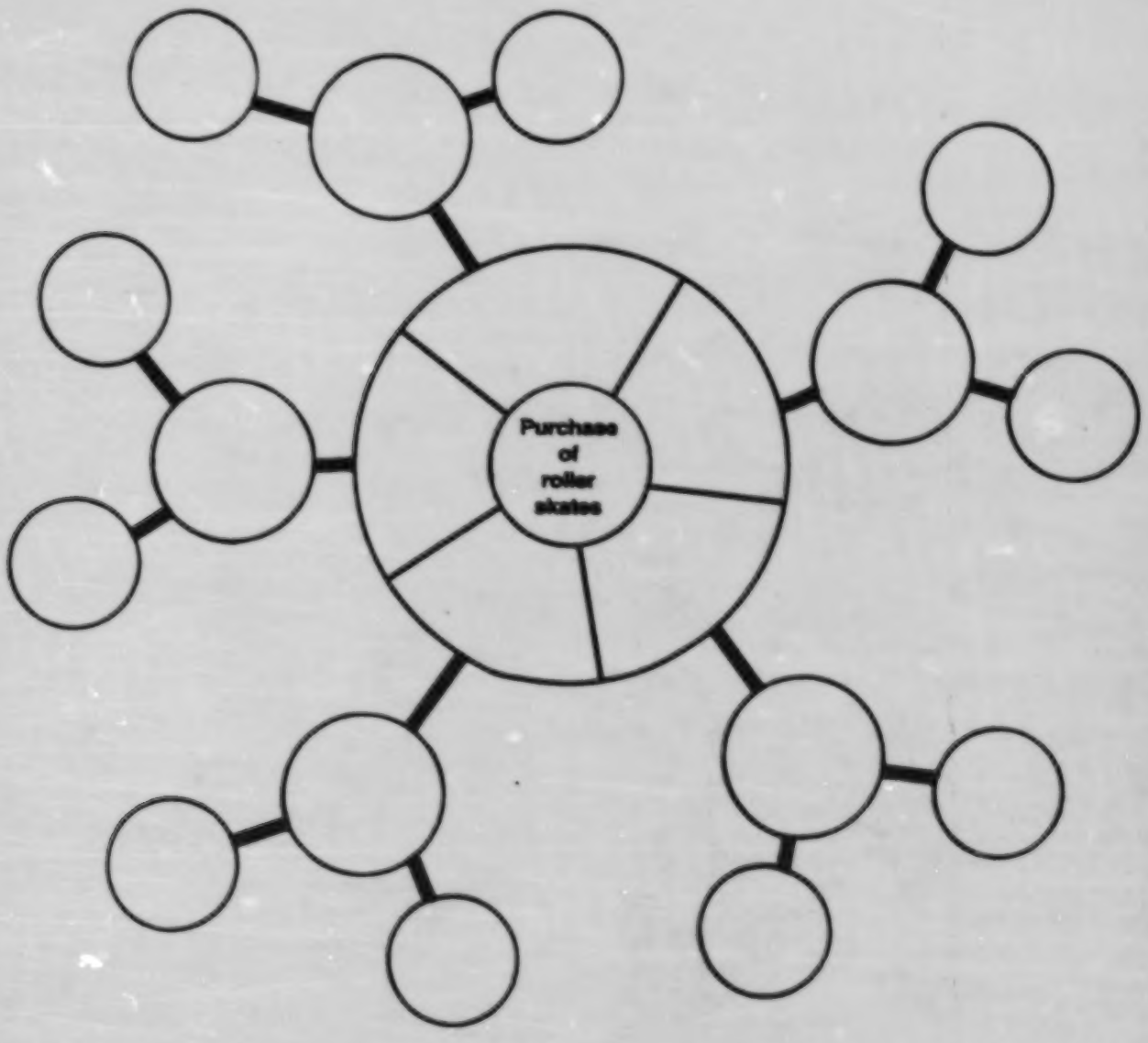
Handout 2-1C

RIPPLE EFFECTS IN THE MARKETPLACE — III

Name _____ Class _____

The diagram below is similar to that in Handout 2-1B. Complete the diagram by filling in the blank segments and circles with the names of the producers directly or indirectly affected by the purchase of roller skates.



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2-2

Market Failures and Information

Obtaining Information for Decision-Making

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVEL 10–12

MAJOR CONCEPTS Market failures and lack of information; costs and benefits of information searches

RELATED CONCEPTS Market characteristics; demand and supply; decision-making; efficiency of resource allocation

INSTRUCTIONAL OBJECTIVES Students will

a Describe how lack of information contributes to market failures;

b Assess costs and benefits of obtaining information in order to make various marketplace decisions.

RATIONALE If the market mechanism functioned perfectly, the quantities supplied would meet the quantities demanded and shortages and surpluses would not occur. In such circumstances, there would be an optimal degree of efficiency in the use of resources in the economy. Such perfection is infrequent for several reasons, one of which is lack of adequate, accurate information about products and/or markets on the part of consumers and producers. Consumer and producer decisions based on inadequate information cause the allocation of resources by the market to be less than optimal.

Producers obtain information about demand, pricing, appropriate technology, and resources from their recordkeeping systems, market surveys, trend analyses, technological research, and publications devoted to their industries. Consumers obtain information about price, quality, sellers, and supply from advertising, comparison shopping, reports and articles concerning products and markets, other consumers, and consumer organizations. In general, the more adequate and accurate the information available to producers and consumers, the higher the probability that marketplace decisions will maximize efficient use of resources.

Obtaining the required information takes time, energy, and know-how. Comparing the costs of obtaining the information against the benefits it provides helps producers and consumers make decisions about how much effort to put into information searches. One of the purposes of this activity is to enable students to make such assessments.

MATERIALS Handouts 2-2A and 2-2B for each student.

PROCEDURES

1 Distribute Handout 2-2A. As a preliminary activity, have students read each of the short paragraphs in the handout and then answer the questions. The students can work alone or in groups. Discuss answers with the class. (The answers appear on page 40.)

2 After discussion of the answers, re-emphasize that a lack of information is an *example* of a market failure. This means that the market does not allocate resources as well as it could when buyers or sellers or both have perfect information. Individual consumers sometimes do not use their resources as efficiently as possible because they lack information.

3 Distribute Handout 2-2B. Have higher-ability classes work through the entire activity (Parts I and II) either alone or in groups, prior to the class discussion. You will probably need to work through the activity with average or below-average classes. (The answers follow those for Handout 2-2A.)

4 After discussion of answers to Handout 2-2B, have class react to the following statement: "A consumer should get as much information as possible before making purchasing decisions." (They should point out that, in some instances, the search costs may outweigh the possible gain in benefits.)

5 Close the lesson by having students comment on whether there is conflict or agreement between the following statements of the central themes of this lesson:

a More information can enable buyers and sellers to make decisions which use resources more efficiently.

b Sometimes the search costs for making a fully informed decision outweigh the benefits to be derived from acquiring complete information.

(NOTE: Students should realize that search costs re-

quire resources, such as time, money, and energy. Yes, having more information can lead to more better-informed decisions which lead to more efficient use of resources, but, perhaps paradoxically, part of being more informed is to know whether the amount of resources needed to secure the information is worth expending.)

EVALUATION Assess the quality of student responses.

HANDOUT 2-2A: QUESTIONS AND ANSWERS

a *What is the common theme running through all the situations?* (There is disappointment with various purchases.)

b *What was the reason for the disappointment in each case?* (EDUARDO faced a lack of buyers for the apples. WILBUR paid a higher price than that charged at another store. GRACE acquired a poorer-quality product than expected. CENTER CITY FIRE DEPARTMENT purchased an engine that did not fit its needs. CARLOS bought a calculator that did not perform all the functions he required.)

c *Are consumers the only ones who make inappropriate purchasing decisions?* (No. The cases described suggest how a businessman (Eduardo) and a part of a local government (a fire department) can make unsatisfactory purchasing decisions because of lack of information.)

d *The lack of information is a primary reason why buyers can be disappointed with their purchases. What information was lacking in each situation described above?* (EDUARDO — the kinds of apples consumers would buy; WILBUR — the alternative sources for a given product; GRACE — the quality of the blouses offered in the marketplace; CENTER CITY FIRE DEPARTMENT — the water capacity needed in a new fire engine; CARLOS — the functions he needed in a calculator.)

e *How did a lack of knowledge in each situation contribute to inefficient use or waste of resources?* (EDUARDO — many apples rotted because of insufficient knowledge of consumer tastes. Wasted money used in purchasing them. WILBUR — wasted money because he bought at a store that charged more for the same set that could be bought for less at another store. GRACE— wasted her money on poor merchandise. Her purchase was an indication that the manufacturer and store could continue to make and sell poor quality clothing. CENTER CITY FIRE DEPARTMENT — wasted taxpayer money by finding it necessary to buy the extra equipment. Could have originally purchased large machine which would have been less expensive than the purchase of two machines. CARLOS — wasted money by first buying wrong machine.)

f *Why — as individuals and as members of society — should we be concerned about how efficiently the nation's resources are used?* (We have only limited means with which to satisfy our wants. If we want to gain optimal satisfaction from our means and resources as individuals and as a society, we should be concerned about using them effectively.)

g *Do you think most buyers sometimes make disappointing purchasing decisions?* (Yes.)

h *Could more information enable individuals and society as a whole to use resources more efficiently?* (Yes.)

i *What can you do to enable you to obtain more information in order to make better-informed buying decisions?* (Some suggestions will include: (1) read labels, pamphlets, informative advertisements, reports, and articles about products; (2) comparison shop; (3) determine precisely what you want in a particular good or service; (4) obtain information from current users of any goods and services you are considering buying.)

j *What are the costs to you of becoming better informed before buying a specific good or service?* (Some possible responses: Time and effort in reading, analyzing, talking with people; money costs for the product-testing reports, transportation for comparative shopping, etc.)

k *Have you ever been disappointed with a particular purchase you made? Describe the situation and the reason for the disappointment. How could you have avoided the disappointment?* (Answers will vary.)

HANDOUT 2-2B, PART I: ANSWERS

Question 1

a List the features of a car that are important to you, read performance reports and literature, visit dealers, talk to owners of those cars under consideration, talk with relatives and friends about various options.

b Time and energy spent listing what you want in a car, in reading materials, in talking with dealers, owners, relatives, and friends. Money costs include the cost of printed information such as issues of *Consumer Reports*, transportation costs for gathering information, lost income if work time is used to obtain information.

c Savings in purchase price, obtaining a better-

quality car, obtaining the car that best meets your wants.

d Answers will vary. It is to be hoped that most of them will be toward the "great payoff" end of the continuum.

e Depends on the payoff indicated. The larger the payoff, the higher the search costs are likely to be.

Question 2

a Go to the store and buy your favorite brand. If the store does not have your favorite brand, you might go to another store. Some students may mention comparison shopping.

b Time spent looking over the brands available in one or several stores and choosing the brand you want.

c Better price or securing the brand you like best.

d Answers will vary. Probably most will be at "little payoff" end of the continuum.

e Depends on the payoff indicated. The smaller the payoff, the lower the search costs should be.

Question 3

The payoffs from an information search for a car are far greater than for chewing gum because there is more variation among cars than among chewing gums. An automobile purchase is also much more expensive and will have a significant effect on your budget over a long period of time because of loan repayments, maintenance and operating expenses, insurance costs, road and bridge tolls, etc. Considerable savings and satisfaction can be generated over a considerable period of time if a great deal of care is taken in making a decision about which car to buy.

Question 4

The search costs incurred for a purchase should be in proportion to the cost of the product, and the amount and duration of the benefits.

HANDOUT 2-2B, PART II: ANSWERS

1 Payoff is more likely to be greater in a market with many sellers because competition is keener in such a market. Another example: Communities with many gasoline stations as compared to those with few.

2 Payoff is more likely to be greater for the product with the many features because both prices and the features offered are likely to vary more widely. Another example: Purchase of a refrigerator as compared to purchase of an ice chest.

3 Payoff is likely to be greater for seasonal products because of savings to be derived by taking advantage of price changes related to supply cycles. Another example: purchasing winter clothing as compared to purchasing clothing for year-round use.

4 Payoff is likely to be greater for items with a high expenditure because of the larger proportion of the budget it absorbs. The payoff is likely to be small for goods or services whose costs are low because the search costs might quickly exceed any possible savings the added information might produce. Another example: purchasing a house for year-round use compared to purchasing a tent for camping.

5 Payoff is greater for the low-income consumer because of the relatively higher value placed by such a consumer on money compared to time. Higher-income consumers generally place a much higher value on their time than lower-income people; hence, the search costs of the former are relatively higher. Another example: Immediate purchase of an automobile from a reputable dealer by a high-income family as contrasted with extensive comparison shopping by a low-income family intending to purchase the same automobile.

Handout 2-2A

DISAPPOINTING DECISIONS

Name _____ Class _____

Directions: Read the following paragraphs and then answer the questions.

Eduardo ordered two bushels of a new variety of apples to sell in his store. He sold only half a bushel before they rotted and spoiled.

Wilbur bought a stereo set at a local shop. A day later he found that he could have saved $50 if he had purchased the same model at another store in town.

Grace purchased a blouse, which she wore once. After she washed it, the blouse shrank and did not fit her.

The ***Center City Fire Department*** bought a fire engine it later found could not carry enough water to meet the department's needs. Consequently, another vehicle to carry water had to be purchased. The total cost would have been less if the department had initially ordered an engine with more water capacity.

Carlos bought a calculator that could perform simple arithmetic operations. He intended to use it in his math courses. He later found that he should have purchased a machine with the capability of calculating square roots. He purchased a machine with that capability and set the first one aside.

Questions:

a What is the common theme running through all the situations? _____

b What was the reason for the disappointment in each case? _____

c Are consumers the only ones who make inappropriate purchasing decisions? _____

d The lack of information is a primary reason why buyers can be disappointed with their purchases. What information was lacking in each situation described above? _____

e How did a lack of knowledge in each situation contribute to inefficient use or waste of resources? _____

_____

f Why — as individuals and as members of society — should we be concerned about how efficiently the nation's resources are used? _____

g Do you think most buyers sometimes make disappointing purchasing decisions? _____

h Could more information enable individuals and society as a whole to use resources more efficiently? _____

i What can you do to enable you to obtain more information in order to make better-informed buying decisions?

_____

j What are the costs to you of becoming better informed before buying a specific good or service? _____

_____

k Have you ever been disappointed with a particular purchase you made? Describe the situation and the reason for the disappointment. How could you have avoided the disappointment? _____

_____

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Handout 2-2B

WORKSHEET FOR ANALYZING INFORMATION PAYOFF

Name _____ Class _____

Part I Purchasing Decisions

Directions: Answer the following questions.

1 Suppose you want to buy a medium-sized car in a certain price range.

a What procedures would you follow to buy the car that would give you the most satisfaction for the amount of money you want to spend?

b What would your search costs be for the purchase?

c What are the payoffs that you can gain from your search costs?

d Indicate on the continuum below the amount of payoff you estimate can be achieved in pursuing a search for information about various automobiles on the market.

_____

Little Payoff Great Payoff

e Considering the payoffs, do you believe you might do a lot of searching or a little searching for this item?

2 Suppose you want to buy a package of chewing gum.

a What procedures would you follow to purchase the chewing gum that would give you the most satisfaction?

b What would your search costs be for the purchase?

c What are the payoffs that you can gain from your search costs?

d Indicate on the continuum the amount of payoff you estimate can be achieved in pursuing a search for information about different kinds and brands of chewing gum.

_____

Little Payoff Great Payoff

e Considering the payoffs, do you believe you might do a lot of searching or a little searching for this item?

3 Is there a difference in your answers about the amount of searching you would do before purchasing a car compared to purchasing a package of chewing gum? Explain why there may or may not be a difference.

4 Does this comparison give you some guidance about the relationship you should keep in mind between search costs and the costliness of the product you plan to buy?

Part II Determining Payoffs under Various Conditions

Directions: Each statement below describes two contrasting markets or products. From the consumer's point of view, in which market or for which product is an extensive search for information more likely to pay off? *(Circle the market or product with the higher payoff. State the reasons for your selection and give at least one other example that illustrates the same type of contrast.)*

1 A product or service for which there are many sellers compared to one for which there are few sellers. *Example:* Many grocery stores compared to few hardware stores in a community.

Reason for response: _____

Other examples: _____

Continued

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Handout 2-2B (concluded)

2 A product which has many features compared to one that has few features. *Example:* Purchase of a lawn-mower the operator rides compared to purchase of a simple lawn-mower the operator pushes.

Reason for response: _____

Other examples: _____

3 An item that is seasonal compared to one that is offered regularly throughout the year. *Example:* Purchasing fresh fruit or vegetables compared to buying salt, flour, or sugar.

Reason for response: _____

Other examples: _____

4 An item that requires a low expenditure in relation to a family's budget compared to an item requiring a relatively high expenditure. *Example:* Purchase of a child's tricycle compared to purchase of a car for the family.

Reason for response: _____

Other examples: _____

5 An expensive item when it is bought by a high-income consumer and when it is bought by a low-income consumer. *Example:* Purchase of a refrigerator by a wealthy family compared to the same purchase by a much poorer family.

Reason for response: _____

Other examples: _____

2-3

How Stretchy Is the Demand?

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVELS 10–12

MAJOR CONCEPTS Demand; elasticity of demand; markets; economic wants; decision-making

RELATED CONCEPTS Substitutability; graphs

INSTRUCTIONAL OBJECTIVES Students will

1 Define price elasticity;

2 Determine the degree of elasticity of various goods and services;

3 Determine the elasticity of demand from the graphs;

4 Explain the implications of elasticity of demand for business and consumer decisions

RATIONALE The variation in the quantities demanded at various prices is related to the particular good or service. The degree of responsiveness of demand to changes in price is called the elasticity of demand. If the percentage change in the quantity demanded varies little or not at all with the percentage change in prices, the demand for the product is called inelastic. If the percentage change in the quantity demanded is proportionately greater than the percentage change in prices, the product is said to have an elastic demand. If the percent change in prices and demand is the same, the demand for the product is said to have unit elasticity.

The purpose of this activity is to show how and why consumer behavior is different for different goods and services as prices change. Understanding the mechanisms involved helps students to better understand consumer and business behavior. This activity provides an overview of elastic and inelastic demand and can be used as a springboard for a deeper analysis of the concepts as they are applied in economics.

MATERIALS One copy of Handouts 2-3A, 2-3B, and 2-3C for each student.

PROCEDURE

1 Distribute a copy of Handout 2-3A to each student for study. You will probably want to allow some time for discussion and clarification of the contents of the handout.

2 Distribute Handout 2-3B to each student. Have students work through the materials either alone or in groups. Hold a class discussion of the answers. Possible answers:

a Answers will vary. Typical goods and services for which demand is elastic include new major appliances, automobiles, new furniture, expensive vacations, expensive jewelry, designer clothes.

b Answers will vary. Typical household purchases for which demand is inelastic include bread, milk, pencils, sugar, salt, flour.

c Answers will vary. Products are listed below in rank order; a rationale for the ranking in each group follows the list.

Group A: mink coat, washing machine, bread

Both the mink coat and the washing machine would take a significant part of the average family's budget. Products with that characteristic are typical of those for which consumer demand is relatively elastic. However, most consumers would consider a washing machine more of a necessity than a mink coat. Therefore, the demand for washing machines is less elastic than that for mink coats. Demand for bread is ranked as the most inelastic because bread is a necessity and is relatively low in price.

Group B: snowmobile, shoes, pencils

A snowmobile costs much more than the other two products. For most people, snowmobiles are a luxury, a characteristic of elastic demand. Even though shoes are considered a necessity, they cost much more and can be repaired more readily than pencils. Therefore, demand for pencils is ranked as more inelastic than that for shoes.

Group C: home computer, gasoline, salt

Demand for home computers is rated as the most elastic because they cost much more in relation to income than the other two items and are a luxury for many families. For most families, salt and gasoline are necessities, a characteristic of products with an inelastic demand. Demand for salt is rated as the most highly inelastic of the

three because of a lack of available substitutes and because the buying of salt accounts for a lower percentage of the total family budget than the buying of gasoline or a home computer.

Group D: ticket to sports event, car tires, chewing gum

This is hard to decide; the rankings for the ticket and for car tires are for the population as a whole. Thus, elasticity of demand for the sports event ticket is ranked as the highest because for most people, acceptable substitute leisure-time pursuits are available. (However, for avid fans of a particular team, demand is much more inelastic because there is little available for them in the way of a substitute.) In the case of tires, the degree of their wear affects the elasticity of a consumer's demand for them. Most of the population has a considerable amount of leeway in determining when to buy new tires; the degree of leeway raises the elasticity of demand. (Consumers whose tires are badly worn out cannot put off a purchase if automobile transportation is a necessity for them; for these consumers, demand for tires is relatively inelastic.) Demand for chewing gum is ranked as the most inelastic because the price of chewing gum is very low in relation to income.

Group E: television set, cosmetics, work uniforms

Demand for the television set is ranked as most elastic because the TV is a major purchase, substitute entertainment is available, and there is a possibility that existing sets can be repaired. Demand for cosmetics ranks second because they are lower priced than television sets but are not as essential to a purchaser as uniforms required for work.

d (1) Demand for the snowmobile would probably be relatively less elastic in northern North Dakota than in New York City because a snowmobile may be quite essential in rural areas with heavy snowfall.

(2) The rankings would probably be the same. However, the owner of the mail order business would view demand for the home computer as relatively less elastic than would the traveling salesperson.

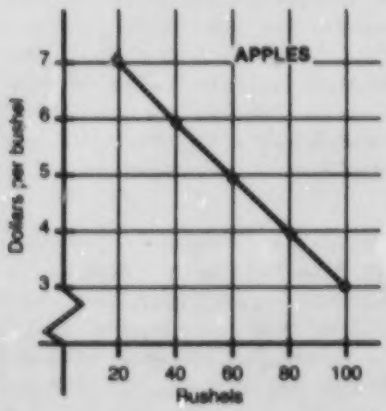
e It would help me better understand my own behavior as a consumer as well as general consumer behavior and business practices. It would help me decide whether I should substitute the purchase of one product for the purchase of another that would fill the same or a similar want.

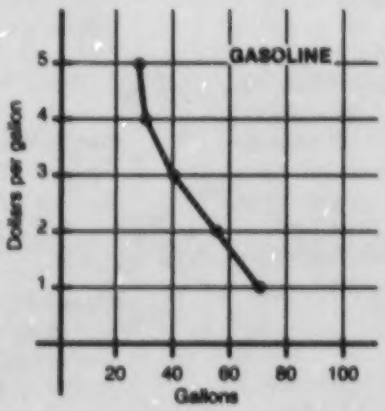
3 Distribute Handout 2-3C to each student. Have students graph the demand curve for each of the products. The completed graphs and answers to the questions are:

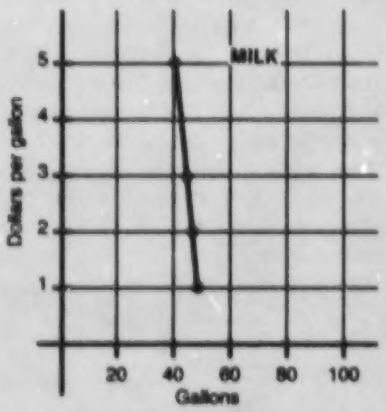
a *Which of the three items has the most elastic demand? Explain your answer.* (Apples. Consumers can substitute many other kinds of fruit or other food for apples.)

b *Which of the three items has the most inelastic demand? Explain your answer.* (Milk. It is considered a necessity and has few acceptable substitutes in the minds of the consuming public.)

c *How does the slope of an elastic demand curve differ from one for inelastic demand?* (The demand curve for an elastic product slopes a good deal from left to right, while that of a more inelastic product tends to resemble a vertical line.)







Handout 2-3A

ELASTICITY OF DEMAND — BACKGROUND MATERIAL

Name _____ Class _____

In general, when the price of a particular good or service goes up, it would be expected that the quantity demanded of the item would fall. However, the relationship between change in price and change in quantity demanded is not always so simple. For example, gasoline prices in the United States rose dramatically in the 1970s. While the quantity of gasoline demanded decreased to some extent, people still needed gasoline to drive to work, to run school buses, to power commercial vehicles used in businesses, and to run tractors on farms. People continued to buy gasoline to meet what they considered to be their basic needs but curtailed whatever other gasoline purchases they could. Some families stayed home instead of taking a vacation; some vacationed closer to home to cut their gasoline needs; some people joined car pools; some cut the number of shopping trips per month, etc.

The degree to which the quantity demanded of a product varies with price changes is called its "elasticity of demand." A product for which demand is elastic will be purchased in proportionately greater quantities at lower prices and in proportionately smaller quantities at higher prices. A product for which demand is inelastic will not show much change in quantity demanded whether the price rises or falls. The elasticity of demand for a variety of products is on a continuum; few exhibit purely elastic demand and few exhibit purely inelastic demand. That is why the terms "relatively inelastic" and "relatively elastic" are commonly used when describing the demand for a particular good or service.

Several factors influence elasticity of demand. Quantity demanded is relatively more constant (inelastic) in relation to price changes for items that have few or no substitutes, for items that are consumed quickly and must be replaced, for items that are necessities rather than luxuries, and for items that cost very little relative to income. Demand tends to be more elastic for items that have good substitutes, can be repaired or restored, are luxuries, or are expensive relative to income.

More specific explanations with examples follow:

1 Demand for a product is more elastic when substitutes are available for it. If the price of beef is considered too high by many consumers, they will cut their demand for beef and buy an alternative product they consider to be less expensive, such as poultry or eggs. If the price of new shoes is viewed as being too high, consumers will tend to buy fewer new shoes and get their old shoes repaired instead. Inelastic demand is observed when good substitutes are not available or are not perceived as being available. The classic example is salt.

2 Luxuries have an elastic demand because consumers will tend to buy proportionately less of them at higher prices than at lower ones. The demand for the necessities of life is relatively inelastic because consumers will buy necessities to a greater extent than they will luxuries in the face of price increases. Consumers will increase their purchases of luxuries more than of necessities in the face of price decreases. Suppliers of milk and bread, for example, face relatively inelastic demand whereas owners of vacation resorts and sellers of expensive jewelry face relatively elastic demands. However, what some people may view as a luxury others may view as a necessity. For example, vacation-time travel may be perceived as a luxury (elastic demand) by one group but as a necessity (inelastic demand) by another.

3 Elastic demand is more likely to be observed in the case of durable goods. Often they can be repaired or refurbished or their purchase can be postponed. Personal typewriters and home computers are examples of durable products with relatively elastic demand. Inelastic demand is more likely to characterize nondurable items that are consumed and must be replenished. Dairy products, vegetables, and some medical services are examples of items for which demand is relatively inelastic.

4 Inexpensive commodities often have inelastic demand (e.g., pencils, throwaway pens, matches) because they take a very small proportion of the consumer's budget, even if their prices rise. Expensive commodities, such as furniture and appliances, tend to have a more elastic demand.

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Handout 2-3B

ELASTICITY OF DEMAND — APPLYING YOUR KNOWLEDGE

Name _____ Class _____

After reading the previous handout, answer the following questions in the manner directed by your teacher.

a Name five goods or services that you or your family uses for which you or your family has a highly elastic demand. Indicate why you consider them to be highly elastic according to the following criteria:

(1) Luxury good or service
(2) Considerable number of available substitutes
(3) Possibility of repair or restoration
(4) Durable good
(5) High cost in proportion to income

b Name five goods or services that you or your family uses for which you or your family has a highly inelastic demand. Indicate why you consider them to be highly inelastic according to the following criteria:

(1) Necessity
(2) Few substitutes
(3) Nondurable good that must be replenished
(4) Low cost in proportion to income

c In each group below, rank the items according to their relative elasticity of demand. Use 1 for the most elastic and 3 for the most inelastic. For each ranking, specify the criterion that contributed most to your ranking. Be prepared to discuss your response.

	Rank	Reasons for Ranking
Group A		
Bread	_____	_____
Mink coat	_____	_____
Washing machine	_____	_____
Group B		
Pencils	_____	_____
Snowmobile	_____	_____
Shoes	_____	_____
Group C		
Home computer	_____	_____
Gasoline	_____	_____
Salt	_____	_____

Continued

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Handout 2-3B (concluded)

	Rank	Reasons for Ranking
Group D		
Car tires	_____	_____
Chewing gum	_____	_____
Ticket to sports event	_____	_____
Group E		
Cosmetics	_____	_____
Television	_____	_____
Work uniforms	_____	_____

d Elasticity of demand for products and services may differ for different groups of people. A luxury to one person may be a necessity to another.

(1) How might a person in northern North Dakota and one who lives in New York City rank the products in Group B — the same or differently? Why?

(2) How would a person who constantly travels for business purposes and a person running a home-based mail order business rank the products in Group C — the same or differently? Why?

e How can knowledge about elastic and inelastic demand be of value to you?

Handout 2-3C

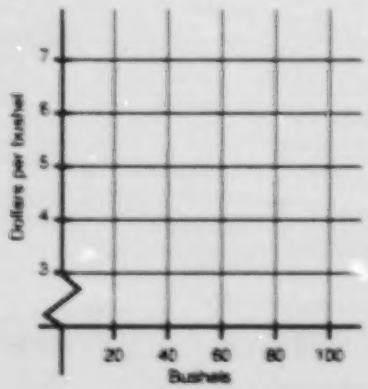
GRAPHING DEMAND

Name _____ Class _____

Directions: Study each of the demand schedules below and plot them on the graphs. Then answer the questions that accompany the graphs.

APPLES

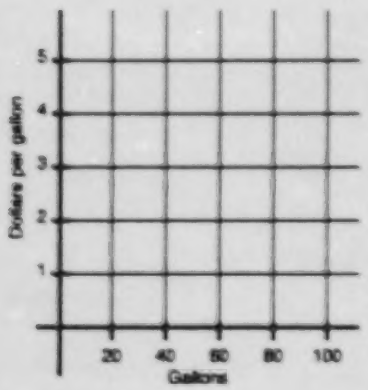
Price per Bushel	Quantity Demanded (bushels)
$7	20
6	40
5	60
4	80
3	100



a Which of the three items has the most elastic demand? Why does it have the most elasticity?

GASOLINE

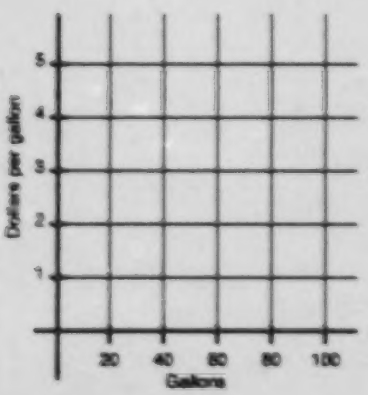
Price per Gallon	Quantity Demanded (gallons)
$5	27
4	30
3	40
2	55
1	70



b Which of the three items has the most inelastic demand? Why does it have the most inelasticity?

MILK

Price per Gallon	Quantity Demanded (gallons)
$5	40
4	42
3	43
2	45
1	48



c How does the slope of a demand curve differ when it is elastic from when it is inelastic?

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2-4

The Consumer Price Index and Price Change

TIME REQUIRED Two or three class periods

MAJOR CONCEPTS Consumer price index; price level changes; index numbers

RELATED CONCEPTS Inflation; percent change (rates of change); averages; weighting; charts and tables

INSTRUCTIONAL OBJECTIVES Students will

1 Define price;

2 Define inflation;

3 Describe the construction of the Consumer Price Index (CPI);

4 Calculate changes in the CPI;

5 Compare rates of change in prices.

RATIONALE There have been times in history when the general price trend — i.e., the average of all prices — has been falling (a period of *deflation*); other times when the trend has been more or less level (a period of *price stability*); and times when the trend has been rising markedly (a period of *inflation*). As everyone is aware, the United States — and the rest of the world as well — during the 1970s and at least well into the 1980s has been undergoing a period of inflation. This lesson is designed to increase students' understanding of inflation, to teach them some basics of how one of the chief measures of trends in the price level — the Consumer Price Index (CPI) — is calculated, and also to introduce them to (or hone their skills at) some measurement concepts, including index numbers. Index numbers are used to present a wide variety of statistics in economics and in many other fields. (For a complete list of all the goods and services in the CPI, see the *Monthly Labor Review*, listed below under Materials.)

MATERIALS

1 A copy of Handouts 2-4A and 2-4B for each student.

2 Recent information on the CPI from the back statistical pages of recent issues of the *Monthly Labor Review*, published by the Bureau of Labor Statistics of the U.S. Department of Labor. Copies are usually available in a public library.

PROCEDURE

1 Ask the class to mention goods or service they bought lately for themselves or their families or that other members of their families have bought. Examples: food; other commodities; automobile-related expenses; tickets to concerts, movies, sports events; purchases of services such as dry cleaning, shoe repairs; bus service and other transportation services; medical and dental services, etc.

Get as large and as varied a selection of such purchase examples as possible and list them on the chalk board. Then go down the list and ask the students whether the price for each item has been going up, staying about the same, or going down. If up, place a plus sign next to the item; if down, a minus sign; if about the same, a zero. Then ask the following questions:

a *If most prices are going up, what is the situation generally called?* (Inflation.)

b *How can inflation be defined?* (A sustained rise in the general price level, that is, in the average of all prices.)

c *If most prices are going down, what is the situation generally called?* (Deflation.)

d *How can deflation be defined?* (Deflation is a sustained decline in the general price level, that is, in the average of all prices.)

2 Write the words Consumer Price Index (CPI) on the board. Ask the students to define "consumer" (buyer of a good or service to be used for personal consumption by individuals or families). Ask the students to define "price" (the quantity of money that must be exchanged to acquire one unit of a good or service). Explain that the Consumer Price Index is a measure of changes in the prices consumers pay for goods and services.

SOURCE: From *Master Curriculum Guide in Economics: Teaching Strategies from Junior High School Level (Grades 7–9)*, Lesson 2-5 (New York: Joint Council on Economic Education, 1981).

3 Distribute Handout 2-4A.* This handout contains background relevant to the entire lesson. Have the students read it and answer the questions it contains.

NOTE: Since students will be reading the data from the chart, their answers to questions (2) and (3) may be considered correct if they are reasonably close to 61 percent and 82 percent.

a Look at the chart on the Consumer Price Index (CPI).

(1) *What can you say about changes in the price level since 1967?* (Prices have been rising. On the whole they increased fastest from about 1972 through 1981.)

(2) *What was the percent change in prices from 1967 to 1975?* (61 percent.)

(3) *Look at the change from 1976 to 1984. What was the percent change in prices for that period?* (82 percent.)

(4) *What change took place in the trend of prices on the chart after 1981?* (They began to go up more slowly.)

b "Inflation" exists during a period when the average of all prices—or the general price level—is increasing.

(1) *Were the 1970s a period of inflation?* (Yes). *Why?* (Because prices were increasing markedly.)

(2) *What has been happening to the general price level during the past twelve months? Has it been stable? Going up? Going down? Fluctuating?* (See latest CPI data and/or price information in newspapers and periodicals.)

4 Ask: What has been happening to individual prices or categories of prices recently? Which do you believe are increasing fastest or slowest now, i.e., in the period when this lesson is being given? Have students explain their answers, especially if they differ among themselves. Perhaps prices have been influenced by recent special events, e.g., a drop in certain food prices because a drought has ended or a rise in gasoline prices because of a cutback in Mideast oil production. Try to have the class discussion end in agreement. Record students' conclusions on the chalkboard. Then, using the latest CPI information, list on the chalkboard the percent changes for each of the principal categories during a recent period. Compare student perceptions with the CPI figures. If the two are markedly dissimilar, could local conditions have differed from the national ones reflected in the CPI?

5 Put the following information on the chalkboard:

From 1979 to 1980, the principal categories and the total of the CPI *increased* by the following percentages:

Food and beverages	8.5%
Housing (including fuel costs)	15.7
Apparel and upkeep	7.1
Transportation (private and public including fuel)	17.8
Medical care	10.9
Entertainment	8.9
Personal care and other	9.0
Special grouping: All energy costs included in above categories)	30.9
Total CPI	13.5

Ask: Based on what you know or have recently experienced, do you think that prices now are going up as fast as they were from 1979 to 1980?

6 Distribute Handout 2-4B. Some students may need help with the calculation required at the end.

EVALUATION Assess the class participation of students, their answers to questions, and their work on the handouts.

HANDOUT 2-2B: QUESTIONS AND ANSWERS

Weighted expenditures (Period Three):

Milk (quart)	$13.00
Bread (loaf)	18.00
Hamburger (lb.)	37.50
	$68.50

a *What is the price index for Period Three?* (145.7).

b *Did the price index rise faster in Period Two or in Period Three?* (Period Two.) *Give the figures to prove your contention: percent rise in Period Two?* (26.6); *in Period Three?* (15.1).

c *What is the total percent rise from Period One to Period Three?* (45.7).

*The parts of this lesson that are contained in Handouts 2-4A and 2-4B are somewhat more complex than the rest of the materials in this volume. Some students, therefore, may need greater assistance than is usual in order to understand or work through those handouts.

Handout 2-4A

THE CONSUMER PRICE INDEX

The United States Bureau of Labor Statistics, a division of the U.S. Department of Labor, issues the Consumer Price Index (CPI) every month. The CPI is the most widely used measure of price trends in the individual goods and services consumers buy as well as in all these prices taken together (total consumer prices). Percent changes are computed in order to find out how much prices may have changed from one period to another.

In order to construct the CPI, unit prices are collected for about 400 different goods and services. They fall into eight main categories that together make up the "market basket" for the index:

Food and beverages	Medical care
Housing	Entertainment
Apparel and upkeep	Personal care
Transportation	Other

Prices for the market basket are collected at some 24,000 different retail outlets. Information is obtained elsewhere on the costs of housing and a few other items. The 400-item market basket for which prices are gathered is typical of what and how much consumers buy. Information on what consumers buy is obtained from them at roughly ten-year intervals. The most recent consumer survey covered about 40,000 families.

In order to compute the total Consumer Price Index or to compute indexes for groups of items (such as for food or for transportation), one must **weight** every item in the market basket. Weighting is a way of combining the items according to their importance in the average consumer budget, that is, according to how much is spent annually on each item. The exercises in Handout 2-5B show how weighting is carried out.

Consumer prices are presented in the form of an index because that allows us to measure the **percent change** in consumer prices from some starting point — a point usually called the **base**. The base for the Consumer Price Index consists of average prices for a year or a group of years. The base for any index is always set at 100.0, and the index shows the changes *from that base*. If prices go up after the base year, the Consumer Price Index will then be more than 100.0. For example, if prices rise 10 percent, the index will be 110.0. If prices had fallen 5 percent instead, the index would have been 95.0.

Presenting the CPI as an index is useful for a second reason. Consumers buy a wide variety of products, and they are priced in many different ways. For example, meat is priced by the pound, light bulbs by their power, refrigerators by — among other things — their size. By setting these various kinds of prices at 100 in the base year and computing the percent changes from the base, it becomes possible to compare price changes among them.

Questions:

The chart on the second page of this handout pictures the behavior of the CPI from 1967 to 1984. After examining it, answer the questions that follow.

a Look at the chart on the Consumer Price Index (CPI).

(1) What can you say about changes in the price level since 1967?

(2) What was the percent change in prices from 1967 to 1975?

(3) Look at the change from 1976 to 1984. What was the percent change in prices for that period?

(4) What change took place in the trend of prices on the chart after 1981?

b "Inflation" exists during a period when the average of all prices — or the general price level — is increasing.

(1) Were the 1970s a period of inflation? Why do you think so?

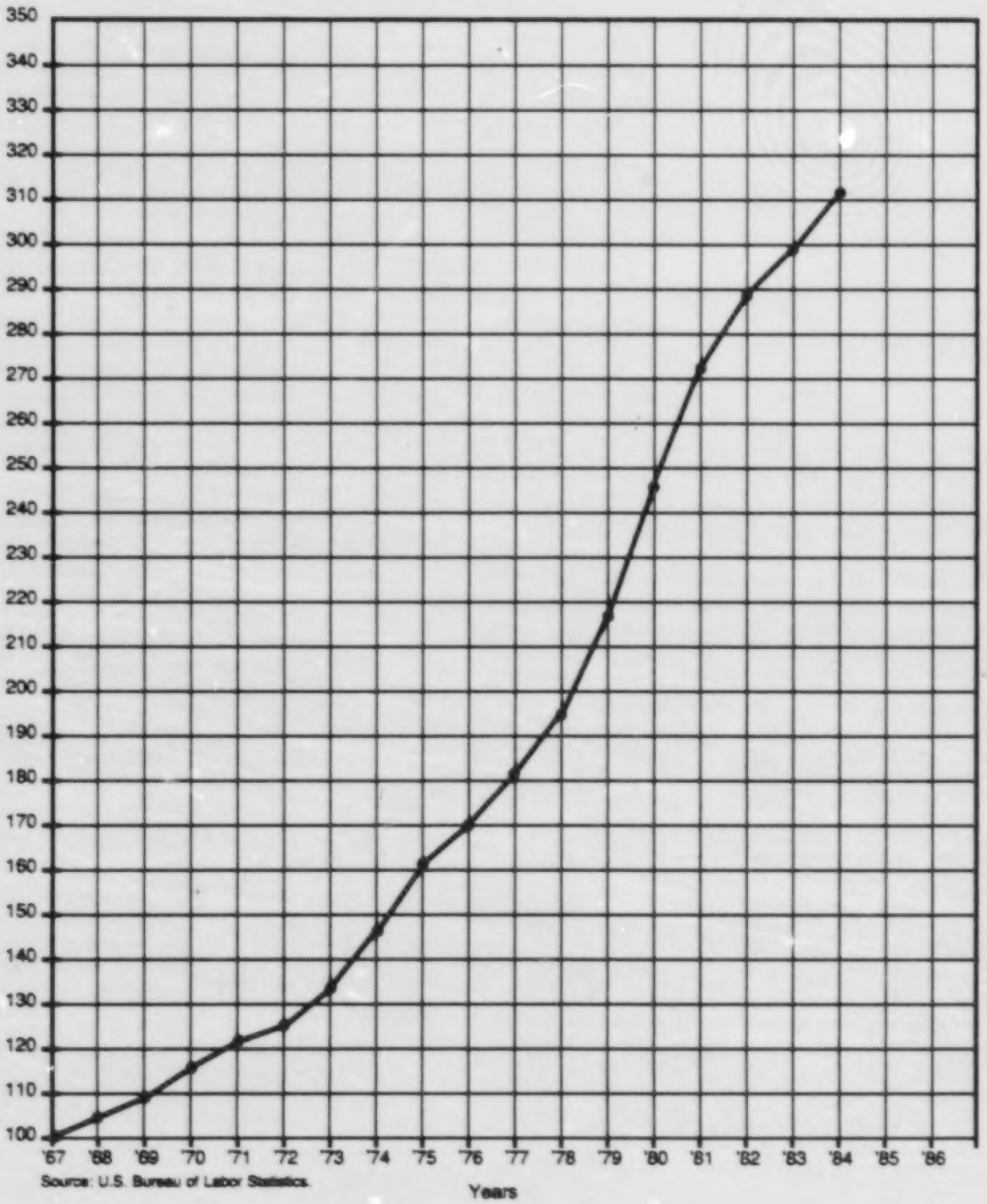
(2) What has been happening to the general price level during the past twelve months? Has it been stable? Going up? Going down? Fluctuating?

Continued

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Handout 2-4A (concluded)

Consumer Price Index
(1967 = 100)



Source: U.S. Bureau of Labor Statistics.

Handout 2-4B

COMPUTING A WEIGHTED CONSUMER PRICE INDEX

Name _____ Class _____

This handout will teach you how to calculate a **weighted** price index. The Consumer Price Index (CPI) needs to be weighted to accurately reflect the importance of various goods and services in the average consumer budget. Weighting is used in calculations that combine individual items that are of different importance. Some consumer items are purchased more frequently or in greater quantity than others. Therefore, their prices should be given a greater weight.

In the following exercise, you will calculate a simplified Consumer Price Index and be able to see how weighting is done. The exercise simplifies the CPI calculation in two ways: (1) It covers only a single part of the entire CPI, the food category. (2) The food category in the exercise contains only three items while the actual food category in the CPI covers 75 foods plus the costs of eating out.

The exercise shows the construction of the index for the same month in three successive years. The calculations for the first two periods have been done for you and are explained. After you read the explanation and examine the calculations for the first two periods, you will calculate the index for the third period.

Look over the examples for the first two months that appear below and the explanation that follows. Note that for each item of food, the Price per Unit given in column 1 is multiplied by the weight (Quantities Bought) in column 2. The results are the Weighted Expenditures shown in column 3.

Look at the numbers for Period One. The first column shows the prices at which a family bought milk, bread, and hamburger purchased in one month. The second column tells how much a family purchased of each item during the month. The figures in the third column result from multiplying the first two columns together. For milk, the family paid 50 cents per quart and bought 20 quarts. Therefore, it spent $10.00 on milk during the month. Similar calculations are made for bread and hamburger.

The $47.00 shown in the last column for Period One is the sum of a family's expenditures on the three foods during the month. Since that is the base month for the index being constructed, the expenditures for Period One are set at 100.0.

In Period Two, because prices have risen, the purchase of the same kinds and quantities of food comes to $59.50. To calculate the price index for Period Two, subtract $47.00 from $59.50. (The answer is $12.50.) Then express $12.50 as a percent of $47.00. (Divide 12.50 by 47 and multiply the result by 100.) The answer is 26.6 percent. Expenditures for the same quantity have risen 26.6 percent from Period One to Period Two. Add the 26.6 percent to the base-period value of 100.0. The result is an index of prices for Period Two of 126.6.

Now comes your turn. Compute the index for Period Three in the same way as just explained for Period Two. That means you will multiply the information in columns 1 and 2 for Period Three and write the results in the third column. Then use the total of the items in the third column to compute the price index for Period Three compared to Period Two as explained in the previous paragraph.

Item	(1) Average Price per Unit	(2) Quantities Bought	(3) Weighted Expenditures (= col. 1 × col. 2)
	Period One (base month, first year)		
Milk (quart)	$0.50	20 quarts	$10.00
Bread (one-pound loaf)	0.40	30 loaves	12.00
Hamburger (pound)	1.00	25 pounds	25.00
			Total food = $47.00
	Period Two (same month, second year)		
Milk (quart)	$0.60	20 quarts	$12.00
Bread (one-pound loaf)	0.50	30 loaves	15.00
Hamburger (pound)	1.30	25 pounds	32.50
			Total food = $59.50

Handout 2-4B (concluded)

Period Three (same month, third year)

Item	(1) Average Price per Unit	(2) Quantities Bought	(3) Weighted Expenditures (= col. 1 × col. 2)
Milk (quart)	$0.65	20 quarts	$_____
Bread (one-pound loaf)	0.60	30 loaves	_____
Hamburger (pound)	1.50	25 pounds	_____
			_____
		Total food =	$_____

Directions: Compute the price index for Period Three in the space below. Write your answers on the line provided in column 3 of the table.

Questions:

a What is the price index for Period Three?_____

b Did the price index rise faster in Period Two or in Period Three?_____

Give the figures to prove your contention: percent rise in Period Two_____;

in Period Three_____

c What is the total percent rise from Period One to Period Three?_____

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3

EFFECTS OF GOVERNMENT ACTIONS ON CONSUMERS

The government influences the economy in many ways. These effects can be grouped into four major categories: the purchase of goods and services by the government, regulatory activities, the redistribution of income, and the maintenance of a healthy economy.

GOVERNMENT PURCHASING OF GOODS, SERVICES, AND RESOURCES

The various levels of government are important buyers in the marketplace for resources and final goods and services. Governments must purchase resources in the process of providing goods and services to the public. For instance, the services of construction companies and labor resources are purchased to build highways; computers and other office equipment are purchased to perform office and recordkeeping functions for school systems. Military trucks, planes, ships, etc., are goods the federal government acquires for defense. In 1983 total government expenditures for federal plus state and local goods and services accounted for $685 million which equaled about one-fifth of our Gross National Product of $3.3 trillion. Citizens should be aware of the tradeoffs when government buys certain goods and services for certain purposes and not others. For example, there is a continuing debate as to how much the government should be spending for national defense purposes and how much for education or health care.

Government buys certain goods and services in part because it is the function of government to provide *public goods and services*. Economists define a pure public good or service as being one that has attributes of shared consumption and nonexclusion. Shared consumption means that one person's use does not lessen the satisfaction another person derives from the good or service. Nonexclusion means that it is difficult or impossible to exclude anyone from gaining satisfaction from an available good or service. Usually, nonexclusion implies that it is not possible to exact a direct payment from the individual receiving the satisfaction. A public street light is a good example. The benefits one person receives from the light do not lessen the benefits derived by another user (shared consumption). Furthermore, it is virtually impossible to exact a direct payment from everyone who gains satisfaction from the light. So, neither all possible users nor possible nonpayers can very well be excluded from the benefits. Thus, the street light should be a public good, paid for by the government from tax revenues. Another good example is national defense. The security from foreign invasion gained by one inhabitant does not detract or take away from the security gained by another (shared consumption). Furthermore, it would be difficult to exclude any person from the benefits of national defense, thus making it impossible to levy a payment according to benefits gained. Government therefore provides this service from the revenue obtained from broadly based taxes.

A *private good or service*, by contrast, is subject to exclusion and not subject to shared consumption. The distribution of ice cream cones is a simple, easily understood example. One can exclude people from enjoying an ice cream cone through the price mechanism: if consumers don't have the money to purchase a cone, they cannot gain any satisfaction from it. Furthermore, there is no shared consumption since buyers generally obtain satisfaction by literally consuming the cone, which leaves no benefits to be derived by others (i.e., no shared consumption). Furthermore, society is not moved by the fact that some people cannot eat ice cream because they cannot afford to pay for it, at least not to the same extent that society is moved by some people's lack of education because of inability to pay.

There is very little controversy about the government's provision of pure public goods. Not only do such goods and services as national defense and a legal system meet the criteria of public goods, they are required for the maintenance of our political and economic system. Without them, there can be no guarantee of protection of society from foreign attack nor of a citizen's rights with respect to contracts, private property, and protection from other persons. A primary question is how much tax support should be expended for pure public goods and services.

There is disagreement regarding the role of government in providing goods and services that do not fully meet the criteria of either a pure public or pure private good or service. In some instances, items that can be easily classified as private goods are provided by the public sector. For example, tennis lessons can be classified as a pure private service; people can be excluded and there is little shared consumption. Yet, some communities provide such services to their citi-

zenry through public recreational programs with either no fee or a nominal one. In such a case, the public has decided that it is willing to provide tax dollars so that this service is available to more people at a low or nonexistent fee. Students should also come to see that community values, as in the case of tennis lessons, can cause some services to be treated as though they were public goods.

REGULATORY ACTIVITIES

Examples of regulatory activities in the markets for various goods and services include legislation and rules to maintain competitiveness in the marketplace, ensure that products are safe and reliable, and discourage fraud. Other examples of regulation are tariffs and other restrictions on imports to shield domestic producers from foreign competition, and minimum wage laws to provide workers with at least basic subsistence.

Many regulatory actions protect one or more groups within the economy, chiefly consumers, businesses (including agriculture), and labor. As with most government activities, there are costs and benefits. Tariffs levied against specific goods may benefit the domestic producers of these goods buf consumers generally have to pay more for these items or accept lower product quality because they must rely on a domestically produced item. Minimum wage laws put a floor under the hourly earnings of some wage earners, but may contribute to unemployment among youths, handicapped people, and others because employers simply tend to hire fewer workers if the minimum wage is set higher than the market rate.

One specific guideline used to help determine when government should take action is that government should consider doing so whenever "spillovers" are involved, because one of the accepted roles of government is to protect its citizens from adverse spillovers and encourage activities that have beneficial spillovers. In general, a spillover, or *externality*, is the positive or negative effect that an economic transaction has on the welfare of people who are not participants in the transaction and which is not reflected in the price of the goods or services involved.

A positive effect, or *external benefit*, is an economic gain that a third party obtains from a transaction between two other parties. For example, an external benefit results from educating the young. Besides the direct benefits that children and their taxpaying parents receive from schooling, others in the community, future employers as well as society as a whole, also benefit. That is one of the reasons why public schools receive financial support from general tax monies instead of from parents only. Education benefits society as a whole, not only those who are in school. Thus the government taxes all individuals to ensure that we get enough education.

A negative effect, or *external cost*, is the economic loss that a third party endures as a result of a transaction between two other parties. One example is air and water pollution from a municipal dump or an industrial site. The effect of such pollution may affect the quality of the environment of residents in nearby communities. For example, if a person buys a product produced by a firm that pollutes an adjacent stream, all those who use the stream are harmed even though many of them may never use the product in question.

Government policies affecting the consumer are complex and subject to controversy. However, it is generally argued that governments in democracies with market-oriented economies should not interfere in the marketplace unless the benefits from such interference are greater than the costs. That principle does not prevent conflict, however, since costs and benefits are not easily measured. One reason for the difficulty is that it is necessary to take into account total social costs and benefits — spillover effects — rather than including only private direct costs and benefits, e.g., production costs, market prices, etc.

In addition to cost-benefit analysis, economists may also use several broad social goals as criteria for evaluating various policies, including economic freedom, economic efficiency, economic equity, full employment, price stability, economic security, and economic growth. (These are defined in the second edition of the JCEE's *Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts* (1984, pp. 52–57). A particular public policy may promote one or more of these social goals but hinder the achievement of others.

In general, regulations concerning the production of a good or service increase the direct cost of doing business and ultimately increase prices in the marketplace. This means, in turn, that the consumer must pay more for some products and thus have less income to spend on other goods and services. Moreover, there are a number of consumer protection regulations about which there is incomplete consensus regarding costs and benefits.

For example, auto safety regulations have measurably increased the direct costs of producing cars. However, it can be argued that the total cost of auto regulation is less than the total benefits, including savings resulting from reduction in auto deaths and injuries, property damage, and air pollution. In this view, auto safety regulation may be seen to reduce economic freedom (cost) but at the same time increase economic efficiency (benefit). The magnitude

of these two factors is in no way easy to measure.

Another example concerns the development of new drugs. Currently, the Food and Drug Administration (FDA) requires extensive testing to protect consumers from drugs with harmful effects. These tests must take place before the drug can be offered on the domestic market. Testing requirements and the time lag between the development of a drug and its approval add to the cost of drugs to consumers. There are claims that the added costs are not always worth the benefits. Critics point out that more lives may be lost than saved because testing requirements can be so severe that drugs which would be helpful to many people are kept off the market — for years, if not permanently. Certainly, placing unsafe drugs on the market would not be in the public interest. But withholding from the market drugs that could benefit a considerable number of people is also not in the public interest. It is a challenging task to define how much testing is worthwhile.

Other Government Regulatory Responsibilities

Government in the United States is responsible for establishing regulations intended to facilitate the use of the economy's highways, air routes, and similar facilities. For instance, traffic regulations make for freer and better travel conditions. Both licensing of automobiles and drivers and establishment of "rules of the road" are costly, but they generate benefits in terms of helping to prevent chaos, and they ease the movement of products and people around the country.

Another government responsibility is to encourage a competitive marketplace by curbing fraud and deceptive practices. In other words, the government acts as a watchdog for the functioning of our economic system. That is why the Federal Trade Commission and the Anti-Trust Division of the Justice Department monitor practices in the marketplace that may be deceptive or which restrain the free exchange of goods or services.

The government has also been active in controlling the use of resources that cannot or should not be privately owned. The harvesting of whales is an example. If government did not control this harvest, whale hunters would benefit and would take as many whales as possible. But they would do so at society's expense, and soon whales would be extinct. Hunting limitations on deer and ducks are other examples of regulated harvesting of a renewable resource.

INCOME REDISTRIBUTION

A third category of government economic activity consists of providing transfer payments, i.e., redistributing income from one group in the economy to another. For example, the government taxes those who receive more than a specified income and uses the receipts to support programs that assist the poor, the unemployed, the elderly, and the disabled, i.e., those who cannot provide for themselves sufficiently. Again, there are costs and benefits. The issues in regard to transfer payments often relate to how much should be taken from one group and given to another. For example, if the amount taken from workers and given to nonworkers is perceived as being too high by the working portion of the population, the latter might be inclined to work less hard or try to hide from the government how much they earn.

MAINTENANCE OF A HEALTHY ECONOMY

At the federal level, maintenance of a healthy economy is mainly accomplished through monetary and fiscal policy. If taxes are lowered, individuals will have more to spend and this spending will spur the production of goods and services. Such a policy is usually desirable during economic recessions. If it is desirable to hold down inflation, the Federal Reserve Board can help to do so by restricting increases in the money supply.

Tax policies can be used to provide incentives for specific economic activities that the citizenry feel should be encouraged. For example, income tax deductions for homeowner's property tax and mortgage interest payments encourage the purchase of residences, which, in turn, helps the housing industry and other industries tied to it. Here is another example: if the government allows businesses to depreciate — "write off" — the value of their machinery at a faster rate than before, this results in a reduction in the taxes businesses pay. Such a tax policy is designed to speed up business investment in new equipment, which should result in an increase in the economy's productivity.

GOVERNMENT ACTIONS AND THE CONSUMER

Consumer education and consumer economics programs in the schools have traditionally focused

on decisions in the marketplace. Knowing about the marketplace and different types of markets is important, but it is not enough.

Approximately one-third of the aggregate income of consumers is currently paid in taxes to various levels of government. The income paid out in taxes cannot be used by consumers to purchase products in the marketplace. Governments use these tax dollars for various purposes, including the provision of certain goods and services the general public needs and wants. Since individuals turn over a sizable part of their income to government, they should be cognizant of what is being done with their money. This involves a recognition that they do get something in return for what they give up as tax dollars. It also is important that individuals evaluate how their tax money is being used by the government so that they can make informed decisions as consumers and citizens through the ballot box and through participation in the political processes that determine what policies governments will institute.

In judging government (public) policies, the individual should determine how particular policies affect society as a whole as well as individual persons. Students should be taught to recognize the trade-offs associated with different policies so as to be able to reach decisions more rationally. The following lessons focus to a great extent on those trade-offs.

3-1

Where Do You Stand?

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVEL Twelfth grade

MAJOR CONCEPTS Broad social goals of economic freedom, economic efficiency, economic security, economic equity, full employment, price stability, and economic growth; opportunity costs and trade-offs

RELATED CONCEPT Externalities

INSTRUCTIONAL OBJECTIVES Students will

1 Make value judgments about the relative costs and benefits of government intervention and regulation in the U.S. economic system;

2 Specify the broad social goals affected by various government actions;

3 Describe the trade-offs that must be made among broad social goals when different government actions have effects that result in conflicts among the goals.

RATIONALE Individuals must be able to analyze public policy issues in order to make well-informed decisions in the polling booth or in civic organizations to which they belong. This lesson leads students to examine both their personal beliefs regarding the role of government regulation and to analyze how various public policies affect broad social goals.

MATERIALS One copy of Handouts 3-1A and 3-1B for each student.

PROCEDURE

1 Ask students to name ways in which government regulation affects their lives. (Examples might include required school attendance, compulsory licensing of automobile drivers, cleanliness standards for restaurants.)

2 Distribute Handout 3-1A and help the class to understand what the various broad social goals are. (If you need more information, see the appropriate section of the JCEE's *Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts.*)

3 Distribute Handout 3-1B, which describes various existing or possible government policies. Have students determine individually or in groups whether they support or oppose each of these policies. Also have them determine which broad social goals are affected — positively or negatively — by each of the policies (they should refer to Handout 3-1A for this assignment.) After students have finished, have a member of each group or several individuals report their views to the class.

Answers to the question of trade-offs in broad social goals may run along the following lines:

a *Mandatory price and wage controls:* Increase price stability in short run but probably not in the long run. Help prevent wages from rising rapidly in order to keep pace with prices. Price controls may adversely affect economic efficiency because the quality of goods and services may deteriorate and the amount supplied to the market may become insufficient.

b *Publicly supported health care for all citizens:* Enhances personal security (and may promote equity) because people receive health care no matter how little income they have. Probably leads to inefficiencies because people are apt to use free medical services for minor conditions that they themselves can treat or that are not serious enough to require any treatment. Some people in the middle-income brackets will probably have less freedom of choice than they would like because the additional taxes they must pay to support medical care for all could preclude them from having enough after-tax income to continue purchasing their own medical care in the private sector.

c *Guaranteed income above the poverty level for all:* Provides economic security for those who do not find jobs or are unable to work. Increases freedom of choice in the marketplace for lower-income people because they have more income to spend. Lessens freedom of choice in the marketplace for those who pay taxes to support such programs because they have less to spend. May cause national economic efficiency to be lower than it would otherwise be and lessen the possibility of reaching full employment because low-paying jobs will be less attractive to those benefiting from the program.

d *Job training for the unemployed*: Successful job-training efforts would help to achieve national full employment. The use of otherwise unused labor resources to produce needed goods and services would increase economic growth and personal welfare. The economic security of the unemployed would be enhanced because of their ability to secure an income-generating job. It is true, though, that previous job-training efforts for people who are chronically unemployed have not achieved marked success. Those who pay taxes to support a job-training program would have less money to spend and save than otherwise.

e *Eased pollution emission standards for manufacturing plants*: Policy could lead to reduced economic efficiency. Although fewer resources would be devoted directly to pollution control and, therefore, the prices of the manufactured goods would probably be lowered, more resources might be required to remedy the damage to property and to health that might result from the increased pollution.

f *Minimum wage law*: Increases security for those who are employed at low-wage jobs because they are assured of a basic level of income. Hampers achievement of full employment to the extent that jobs are eliminated because employers calculate that paying the minimum wage is paying some employees more than their work is worth.

g *Provision of tax incentives in order to increase saving*: Promotes economic growth and efficiency if the increase in savings results in new investment in more efficient machinery, buildings, and the like that improve productivity and thus make firms more competitive in domestic and world markets. Increases security of individuals because they will have a source of money on which to rely in case of emergencies. Savings incentives contain an element of inequity because only individuals with sufficient income to put some of it aside can take advantage of the incentives. Savings incentives may merely shift savings from one form of holding to another and thus have little or no effect on the economy as a whole.

4 Have students comment on the following statement: Government policies often involve a trade-off between different broad social goals.

EVALUATION Have students analyze how a specific government policy — preferably one recently passed by a state or local or the federal government — affects different social goals.

Handout 3-1A

IMPORTANT BROAD SOCIAL GOALS IN AMERICAN SOCIETY

1 **Economic freedom** — includes freedom of consumers, workers, and producers to make choices in the marketplace.

2 **Economic efficiency** — relates to getting the maximum benefits from our limited productive resources.

3 **Economic equity** — pertains to what is considered fair or unfair about the effects of economic policies.

4 **Economic security** — pertains to the desire of people for protection against various economic risks over which they have little or no control, such as unemployment, bank failures, destitution in old age.

5 **Full employment** — prevails when all of an economy's resources are being utilized to capacity.

6 **Price stability** — the absence of inflation or deflation in the general price level.

7 **Economic growth** — the production of increasing amounts of goods and services over the long run.

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1986. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Handout 3-1B

WHERE DO YOU STAND?

Name _____ Class _____

Directions: Indicate whether you support or oppose each of the government regulations or programs listed in the left-hand column. Also indicate which broad social goals are promoted and which are held back by the adoption of the program or regulation. Use Handout 3-1A to assist you in specifying the broad social goals affected by each government activity.

			TRADE-OFFS	
GOVERNMENT PROGRAM OR REGULATION	**SUPPORT**	**OPPOSE**	**Broad Social Goal Promoted**	**Broad Social Goal Held Back**
a Mandatory price and wage controls				
b Publicly supported health care for all citizens				
c Guaranteed income above the poverty level for all				
d Job training for the unemployed				
e Eased pollution emission standards for manufacturing plants				
f Minimum wage laws				
g Sizable tax incentives for saving money				

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

3-2

Private or Public?

TIME REQUIRED One or two class periods

RECOMMENDED GRADE LEVEL 9–12

MAJOR CONCEPTS Public goods; private goods; mixed market economy; exclusion; shared consumption; economic equity; externalities

RELATED CONCEPTS Opportunity costs and trade-offs

INSTRUCTIONAL OBJECTIVES Students will:

1 Explain the differences between private and public goods and services;

2 Define the terms "nonexclusion" and "shared consumption" as they relate to the provision of private and public goods and services;

3 Explain how externalities (spillover effects) and equity issues can affect decisions about whether the private or the public sector should provide goods and services;

4 Apply economic concepts and their own value structures (personal and social) to an analytic problem dealing with the role of government and business in providing various goods and services.

RATIONALE Questions relating to government participation in providing goods and services have become numerous and more controversial. In exercising their rights and responsibilities as citizens, students will need to apply economic principles and analytic tools when they weigh arguments for more or less government participation. Students should also realize that they consume goods and services provided by both the private and the public domains.

MATERIALS One copy of Handouts 3-2A and 3-2B for each student.

PROCEDURES

1 If there are both public or private schools in your community, ask what differences there are between these two types of institutions in how they are supported. Ask why these differences exist.

2 Explain how the education example above illustrates the difference between private and public goods and services, along the lines of the following paragraphs:

Private goods and services are those produced by businesses or nonprofit institutions and sold to individuals or groups of individuals who pay for them directly.

Public goods and services are provided by government. In some cases, the government produces the goods and services, as is the case with the services of public schools. In the other instances, the items, such as new roads, may be produced by business but are provided by government to the public. The government pays for the construction of the roads with tax revenues.

3 Distribute Handout 3-2A. Go over the instructions with the students. Then allow them 5–10 minutes to complete the worksheet.

4 When time is up, have one student copy a completed continuum on the chalkboard and explain the criteria used to decide where to place individual products. Examples of acceptable criteria students may mention include: importance for most or all citizens, economic efficiency, spillover benefits, innovation, difficulty in getting direct users to pay, flexibility, extent of profitability in providing the good.

5 Ask rest of class whether anyone placed the products in other positions on the continuum. If so, ask those students to state the criteria they used to decide where to place each product. Write the criteria on the board.

6 Distribute Handout 3-2B. Allow time for discussing the reading and to provide additional examples of goods and services that meet the criteria of shared consumption and nonexclusion. Point out that there are some goods and services that could be classified as pure private goods but which are provided by the public sector. Elementary schools and recreational programs are examples. Yet, most communities obtain these from the public sector. The reason is primarily because of positive spillover effects on the community and society as well as equity considerations. For example, citizens without children can benefit from having educational and recreational facilities available for the children of the community because the effects on the children improve

the quality of life for all residents. That is why the cost is borne by the entire community through taxes. Economists call such a positive spillover effect a "positive externality." In addition there is a prevailing feeling that all individuals should be given certain opportunities to improve themselves, regardless of their own economic means. When such services are provided by the public sector, everyone can take advantage of them instead of only the people who can afford to buy these services in the marketplace.

7 After you have covered the background material, ask students to re-evaluate their entries on the continuum. Would they change any of their initial responses? Why or why not? (Watch for students' use of the concepts of nonexclusion, shared consumption, equity, and positive externalities to justify an existing or changed placement of items on the continuum.)

8 For those goods and services about which there is much controversy among the students, the decision-making process outlined in Lesson 1-1 may be used to help the class think through the alternatives.

9 OPTIONAL: As a follow-up activity, you might focus on current issues that relate to whether the business sector and/or the public sector should be providing certain services. For example:

a Should passenger and freight train transportation be provided by the government or by the private sector?

b Should a public school's football program be financed primarily by admission fees, tax dollars, or some combination of both? Explain.

c What are some of the advantages and disadvantages of converting all interstate highways into tollroads instead of financing them with funding from federal tax monies?

EVALUATION Evaluation should be based on the quality of the response in the second round of the activity.

Handout 3-2A

PRIVATE VS. PUBLIC

Name _____ Class _____

Directions: Indicate your preferences and judgments concerning the degree to which you believe the goods and services listed below can best be provided by the government or by private business. Do so by placing the capital letter that precedes each good or service on the continuum at the bottom of the page. If you believe that a particular good or service should be provided by private business, place its capital letter at or near the left end of the line, where the word "Private" appears. Place letters for the goods or services you think are better provided by government toward the right end of the line. If you regard the answer as to who should provide the product as a toss-up, place the letter in or near the middle.

When you have placed all the letters on the continuum, draw a vertical line to separate those goods and services which you would *prefer* to see provided privately from those which you would like government to provide.

A College education
B Electric power
C National defense
D Retail selling of groceries
E Supplying of water
F Professional sport events
G Postal service
H Interstate highway facilities
I Elementary schooling
J Police protection
K Garbage collection
L Recreational facilities

WHO SHOULD PROVIDE THE PRODUCT?

Private ***Government***

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Handout 3-2B

PRIVATE OR PUBLIC? PUBLIC GOODS AND SERVICES

OUR ECONOMIC SYSTEM

An economic system is the way in which people and societies organize economic life to answer three basic questions: (1) *What* goods and services will be produced? (2)) *How* will they be produced? (3)) For *whom* will they be produced?

In the United States and Canada, most production decisions — *what, how,* and *for whom* — are made in the marketplace through interaction of buyers and sellers. This is called the *private sector* of our economy. Other decisions are made by different levels of government. This is called the *public sector* of our economy. Our economic system is often called a *mixed system* since we produce a combination of private and public goods and services.

WHAT GOODS AND SERVICES SHOULD BE PROVIDED BY GOVERNMENTS?

While many goods and services can be effectively provided by the private sector, a few can be provided effectively only by governments. Others can be provided by either, and many goods and services provided by governments are actually produced by private firms. Generally governments try to provide the goods and services that are necessary for the welfare of all the people but that individual consumers might not purchase directly on their own. There are two criteria that can be used in judging whether something should be provided by governments — *nonexclusion* and *shared consumption*.

Nonexclusion. In some situations people cannot be excluded from the benefits of a good or service even if they do not pay for it. If only part of the people bought national defense, for example, the others could not be excluded from the benefits. The nonpurchasers would be protected just as much as the purchasers.

Shared consumption (or joint use). In some situations one person's use or consumption of a good or service does not reduce its usefulness to others. The security one person receives from a street light is not diminished by a neighbor receiving the same security. The protection provided by the street light is not reduced by additional people using it.

Private businesses will not produce things that people are not willing to buy, and individual consumers are very reluctant to pay directly for goods and services from which others who do not pay will reap the benefits. "Why should I be the one to buy the street light, if everyone else is getting the benefits?" Governments therefore must provide some goods and services such as national defense, flood control, and judicial and legal systems, which are characterized by shared consumption and are necessarily or should be non-exclusive.

PRIVATE AND PUBLIC GOODS

"Pure" private goods are subject to exclusion and not subject to shared consumption. They are purchased directly in the marketplace. "Pure" public goods are not subject to exclusion and are subject to shared consumption. They are purchased indirectly through tax dollars.

Some goods have elements of both private goods and public goods. Fishing in the ocean, for example, is generally not subject to exclusion, but once fish are caught by one person they are not available to others. Likewise, it is sometimes possible to exclude people from theaters, parks, or even roads by charging admission fees or tolls, but the viewing of a movie or the use of a park or a highway by one person usually does not reduce its usefulness to others. Controversy often arises over how these "mixed" goods — sometimes called "common pool resources" and "toll goods" (see chart) — should be provided and who should pay for them.

Combinations of Exclusion and Shared Consumption

		SHARED CONSUMPTION	
		NO	YES
EXCLUSION	YES	PURE PRIVATE GOODS Haircuts, bread, ice cream.	"TOLL" GOODS Theaters, cable TV, parks, toll roads.
	NO	COMMON POOL RESOURCES Fish taken from the ocean, irrigation water taken from a river, congested roads.	PURE PUBLIC GOODS National defense, flood control, street lights, air pollution, mosquito abatement, judicial and legal system, public TV, uncongested roads.

From *A Guide to Give & Take* (Bloomington, IN: Agency for Instructional Technology, 1982), p. 16. Reprinted with permission of the Agency for Instructional Technology, Box A, Bloomington, IN 47401.

3-3

The Cost of Rent Control

TIME REQUIRED At least two class periods

RECOMMENDED GRADE LEVEL 9–12

MAJOR CONCEPTS Income distribution; supply; demand; price mechanism; economic freedom; economic equity

INSTRUCTIONAL OBJECTIVES Students will

1 Describe rent control as a form of market regulation and intervention by the government;

2 Indicate the long-term effects of rent control, including how incomes may be redistributed in a community as a result of imposing rent control;

3 Explain the impact of rent control on the supply of and demand for rental properties;

4 Evaluate the worth of rent control in terms of the broad social goals of economic freedom and economic equity.

RATIONALE Rigid rent controls are used in few American cities at present. During World War II, however, such controls were widely used to control the rental costs of apartments and houses. Personal positions on this specific government regulation of and intervention in the housing market often depend largely on whether one is a landlord or tenant, although other circumstances may also be influential. Both the short- and long-range consequences must be weighed in determining the merits of rent control.

MATERIALS A copy of Handout 3-3A for each student.

PROCEDURE

1 Make sure students understand that the price mechanism is the primary means of determining the supply and the allocation of goods and services in the U.S. economy. Then introduce the lesson by having class suppose that 6,000 families wanted to live in a town in which there were only 4,000 housing units available. Then ask: What do you think would happen to the prices (rents) of the available units and why would that happen? *(The prices would rise, which would prevent those families that could not afford the higher rents to live in the town.)* It may be necessary to review the law of demand: as price increases, the quantity demanded generally decreases; conversely, as prices fall, the quantity demanded generally rises.

2 Explain to the class that instead of having rents determined by supply and demand in the marketplace, the government can control the price through regulation — one form of which is rent control. If rent control exists, it is likely to be in geographical areas where rents are escalating quite rapidly because the demand for rental units greatly exceeds the available supply.

3 Have students read the articles in Handout 3-3A, which describe the evolution of rent control in Santa Monica. As students read, they should make notes as needed for answering the handout questions in class. Then call on students to answer the questions; allow time for discussion and clarification of answers.

a *Before the establishment of the rent control board, why would owning rental property in Santa Monica have been viewed as a favorable investment?*

— The average income of the population is high, which implies that the average household can afford to pay a relatively high rent.

— Santa Monica is near the major job center of Los Angeles, which implies a high demand for housing in Santa Monica.

— Santa Monica is a pleasant community in which to live because it is smog free and is also scenic, with many parks and ocean views. These factors contribute to high demand for housing.

— There is no apparent surplus of rental units relative to demand.

b *Why was there no oversupply of housing units in Santa Monica despite a 10 percent growth in the housing stock between 1970 and 1980 while the population gain was only 25 people?* (The growth in the number of households seeking housing units far exceeded the growth of population because an increased number of single people and young married couples sought their own homes.)

c *Why were rents increasing so rapidly in Santa Monica?* (Available demand outstripped

supply even while rents were increasing. Moreover, inflation was raising the costs borne by property owners.)

d *Why did the property tax cuts revive interest in rent control legislation?* (Renters did not see decreases in their rents after property taxes were cut.)

e *What reasons does the article give to explain why owners of rental housing did not lower rents when taxes were lowered?* (Other costs were rising because of inflation. There was also a heavy demand for rental units, a factor that put upward pressure on rents.)

f *Why and how was rent control imposed on the rental market in Santa Monica?* (Renters comprised 80 percent of the population and wanted to stop the large rent increases. Most renters voted to institute rent control in an election, and the law instituting rent control therefore passed.)

g *How were rents determined by the rent control board?* (The board based rents on the rate of return on the original cash investment less any special tax benefits the owner received.)

h *What additional restrictions were imposed on owners of rental housing in Santa Monica?* (Even owners with cash flow problems — i.e., those whose rental incomes plus depreciation allowances did not meet their current expenses — were required to maintain the buildings or face criminal action. Owners could not withdraw units from the market or convert them to condominiums without approval from the rent board.)

i *Would the resale value of rental buildings be higher or lower than otherwise because rent control was imposed?* (Lower, because the return on investment in residential buildings would be lower than the amount that could be earned under freer interaction of supply and demand in this particular city.)

j *What is meant when economists say that rent control achieves a forced redistribution of income?* (Property owners do not receive as much rental income as they would get in a free market. This leaves less money in the hands of owners and more money in the hands of renters.)

k *Why were the tenants happy with rent controls and the rental-property owners unhappy?* (Tenants paid less rent than they would have without rent controls. Owners were unhappy because under rent control they received less income than they otherwise would have and also because they expected the controlled rents to give them a low rate of return on their investments.)

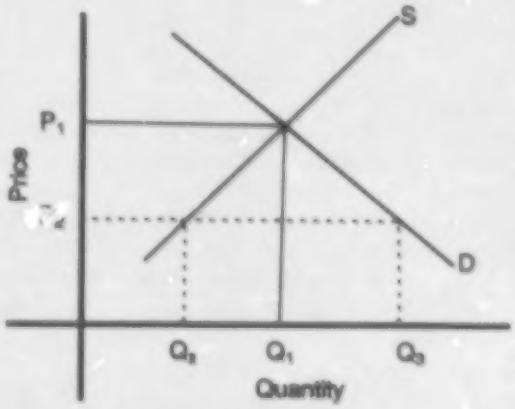
l *If rent control were to be continued for 20 years in Santa Monica, how would it affect the following:*

— *Amount of new Santa Monica rental property that will be available.* (The amount of new rental housing built will be less than without rent controls. Investors or builders will be limited in the amount they can charge in rent, and the return on their investment is likely to be lower than if they built elsewhere or invested in other industries. Moreover, dealing with the rent control board entails extra time and trouble for the property owners.)

— *Quality of Santa Monica rental property available.* (There will be little incentive or funds for property owners to provide more than the minimum maintenance required by law. In time, many properties may well deteriorate.)

— *Age of Santa Monica population in the absence of any other major economic changes.* (There will be little incentive, from a rental standpoint, for residents to move to other areas. Thus, the average age of the population will probably increase.)

4 After students answer the questions, use a supply and demand curve like the one below to show what basically occurs when rent control is put into effect over a period of time. Indicate that the graph shows the relationship between quantity supplied and demanded when the average rent is set by a market and when the average rent is fixed under rent control.



where P_1 = market-clearing price, i.e., rental price based on interaction of supply and demand;
P_2 = price instituted by rent control board;
Q_1 = market-clearing quantity;
Q_2 = quantity supplied at controlled price;
Q_3 = quantity demanded at controlled price.

Then ask the following questions based on an analysis of the graph.

a *At the price set by the rent control board, what is the relationship between the supply and demand for available rental housing?* (Quantity demanded is higher than available supply because the controlled rental price is lower than the market-clearing price. The price set by rent control is not an equilibrium price at which the amounts supplied and demanded are equal.)

b *What would happen to the available supply of housing units if rent controls were eliminated?* (It would increase as shown by the greater supply (Q_3) at the point P_1, the market-clearing rent.)

c *How do consumers gain and lose through rent controls?* (For those who can secure rent controlled units, rents will be lower than without the controls. However, individuals or families interested in moving into the area may encounter difficulties because the supply of housing units will not expand to keep pace with demand since the controls are a disincentive to would-be builders of rental housing. Those who do secure rental units may find the maintenance of these units to be minimal because the owners do not have the funds to do major repairs or renovation. In addition, the supply of housing units built for sale to others may well increase compared to the supply of rental units.)

5 Point out that a study of the effects of rent controls on the housing market can be evaluated according to various broad social goals. Two of these goals are economic freedom and economic equity. Economic freedom can be defined as the freedom of consumers, workers, and investors to make choices in the marketplace without interference from government or other powerful forces such as monopolies. Economic equity is defined as what is considered to be fair — free of bias or favoritism. Economic equity is hard to define precisely because what is considered fair by one group may be considered unfair by another. After defining the terms, have the class consider the following questions:

a *What was the primary social goal underlying the majority vote for rent control legislation — freedom or equity?* (Equity. Renters believed the rent increases demanded by the property owners were too great and therefore unfair. Some renters were forced to move elsewhere because of the higher rents. Therefore, most renters voted to have their local government alleviate the situation by instituting rent controls. Some of the renters who voted for controls could have been easily able to afford paying higher rents but favored control because controls benefited them financially.)

b *What social goal was being violated according to the property owners?* (Economic freedom. Their freedom to set rents as high as the market would allow was being limited by the rent control board.)

c *What group of consumers might think their freedom was violated by the rent control mechanism?* (Those who wanted to rent living quarters in Santa Monica but were unable to do so because by making rental housing unattractive as an investment, rent controls limited the amount of new rental housing that was being built.)

d *Give examples illustrating the following statement: "Rent controls promote one social goal but impair the achievement of another."* (Responses will vary.)

EVALUATION Have students state whether they are for or against rent control and why. Evaluate their understanding of the primary objectives of the lesson on the basis of the reasons they give for their replies and not according to whether they are for or against rent controls.

Handout 3-3A

CASE STUDY: RENT CONTROL IN SANTA MONICA

SANTA MONICA'S SUBURBAN RADICALS[1]

. . . Santa Monica has 88,000 people in its compact 8.3 square miles, and some 80 percent of them are renters. Some of the renters are elderly pensioners [from 15 percent to 40 percent, according to various estimates]. . . . Many more renters are young professionals, who jog in swarms, morning and evening, in the parks overlooking the ocean. According to the U.S. Treasury Revenue Sharing Office, the city's per capita income is 29 percent higher than that of Los Angeles County.

Although local radicals worry about its "untrammeled development," the city gained only 25 persons between the 1970 and 1980 census. Its housing stock grew by 10%, however. As elsewhere, large families were giving way to singles and young marrieds, and high-rise condominiums were springing up to house them. With freeway access to downtown Los Angeles, smog-free Santa Monica would be a prime site for real estate development, except for the people who already live there. . . .

[L]ocal landlords find rent control very threatening indeed. To those who bear its economic burden, Santa Monica's form of rent control looks like a means of buying votes by a forced redistribution of wealth. . . .

. . . The first referendum on rent control lost heavily in June 1978. Yet the . . . property tax cuts that passed that same day ironically revived rent control agitation across the state.

Very little of the property owners' tax savings showed up in lower rents, which were under upward pressure from other inflationary costs and a booming rental market. The Renters' Rights coalition put the charter amendment back on the ballot in April 1979. Santa Monica voters gave it a 54% margin. . . .

The charter amendment established a rent control board to be elected by city voters, the only place in the country where a voting majority with a financial stake in the outcome of these quasi-judicial decisions elect[s] the persons who make them. In the first rent control board election, the Renters' Rights group took all the seats. . . .

In apartment house by apartment house, committees that organized to petition for lower rents had their efforts rewarded by favorable rent board decisions, and each committee became another unit in the Renters'Rights election network. Apartment owners reacted with fury; according to one account, they booed and hooted at early board meetings from the pledge of allegiance through the reading of the minutes and interrupted tenant speakers with catcalls.

The details of the law go far beyond regulating rents, economically damaging as that may be. According to Lowell Wedemeyer, an attorney who represents many local landlords, the board not only forces landlords to operate at a cash loss, it makes evictions practically impossible and prohibits owners from removing vacant apartments from the rental market.

On paper, says attorney Wedemeyer, the board determines rents by the rate of return on the original cash investment, no matter how long ago it was made. So there is no way rents can keep pace with inflation. Yet landlords with negative cash flow face criminal action if they neglect building maintenance. One part of the ordinance even makes it a misdemeanor, punishable by six months in jail or a fine, for a landlord to institute court proceedings to evict a tenant without first going through the rent board. Landlords can't withdraw units from the market or convert them to condominiums without rent board approval, which is slow in coming.

Rent control advocates often argue that buildings aren't run for a cash profit but for the tax shelter the rapid depreciation provides for high-income investors. But the Santa Monica law goes one step further, subtracting from every rent increase application the amount its hearing officers figure the owner saves in tax write-offs. The local law provides for figuring this amount as if the owner were in a 40% tax bracket, no matter what his actual income is.

The Renters' Rights people seem to think this law hurts only well-heeled landlords, speculators, and Saudi [Arabian] investors. Mayor [Ruth] Goldway argues that small landlords are protected by the exemption of three-unit, owner-occupied buildings. But landlord Stavisa M. Milosavljevic tells a far different story.

A disabled mechanical engineer, Mr. Milosavljevic owns one building of six units and says his rents fall far

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1 Excerpted from "Santa Monica's Suburban Radicals," by James Ring Adams, *The Wall Street Journal*, July 1, 1981. Reprinted with permission of the *Wall Street Journal*, © Dow Jones & Company 1981; all rights reserved. The adaptation excludes those portions of the original article that concern matters other than rent control — the subject of this lesson.

short of his annual taxes, bank payments, and costs. The rent board, he says, has been totally capricious in setting his rents, giving a special break to one tenant who was a rent activist. The majority of Santa Monica landlords, he says, are "mom-and-pop" operators in his situation. . . .

Mr. Milosavljevic has brought one of some 150 landlord suits against the rent control charter or the rent board. Most have been successful in overturning specific rent board decisions, though at a cost to the landlords of some half million dollars in legal fees. Both sides are closely watching a major suit in which a lower court said parts of the law might be unconstitutional. The decision came a month before the election, and the Renters' Rights slate thinks their promise to defend the law strongly swelled their margin. Other observers think that the hope the law will be struck down has kept the Santa Monica housing market from collapsing.

In the meantime, the housing industry fears that radicals now have a program that can win the support of any electorate comprised mainly of renters. They've gone to state and federal levels to try to forestall it. But Mayor Goldway isn't worried by a current U.S. Senate drive to suspend federal housing aid to communities with rent control. "The total help for 1980-81 in the city from the federal government is $77 million," she says. "We have a UCLA [University of California at Los Angeles] estimate that tenants saved in one year of rent control approximately $54 million. There is no way that federal programs can have leverage on us."

The Santa Monica experiment may wind up forcing the "mom-and-pop" owners to sell out to anyone with the cash reserves to wait out the legal challenge.

The ironic result would be that the policies of "economic democracy" would bring about a further concentration of Santa Monica property in the hands of speculators and large corporations. But one can argue that the experiment should be left alone, as long as local voters want it, if only to be an example to the rest of the country.

SANTA MONICA'S LID ON RENTS[2]

James Ring Adam's editorial page article regarding [the] Santa Monica Rent Control Law (July 1) was misleading regarding the "plight" of the "mom and pop" landlords.

As a long-term resident/tenant of Santa Monica, I have seen the rents escalate substantially in excess of the inflation rate due to a severe housing shortage (which occurred before rent controls, not because of rent controls). However, the landlords who are now in an economic bind are all new owners who speculated that further rampant inflation and rent increases would bail them out of economically unsound investments in apartment units that were obviously money losers at the price and terms at which they were purchased.

Poor Mr. Malosavljevic appears to be one of those buyers who knew what the cash flow loss was when he purchased his building and hoped that he could raise rents further to cover his losses; he could not do so due to the passage of rent control.

Most of the long-term "mom and pop" owners of units in Santa Monica are doing quite well, based on allowed annual rent increases of 6%-7% and their older mortgages, which were made at more economically sound purchase terms. Only the recent speculators appear to be the ones suffering. And, of course, speculation should, and in the case of Santa Monica did, entail substantial risks.

If the political winds of Santa Monica have turned against the landlords, it is only because the tenants had no other recourse against the pressures of unbearable rent raises. The rent control law, though possibly unfair to landlords on an economic basis, may have avoided a far worse sort of political situation when many tenants would have been evicted with no place to go.

Allan M. Mannheim

Beverly Hills, Calif.

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2 From "Letters to the Editors," *The Wall Street Journal*, July 9, 1981. Reprinted with permission of *The Wall Street Journal* © 1984 Dow Jones & Company, Inc. All rights reserved.

Handout 3-3A (concluded)

Name _____ Class _____

Questions:

a Before the establishment of the rent control board, why would owning rental property in Santa Monica have been viewed as a favorable investment?

b Why was there no oversupply of housing units in Santa Monica despite a 10 percent growth in the housing stock between 1970 and 1980 while the population gain was only 25 people?

c Why were rents increasing so rapidly in Santa Monica?

d Why did the property tax cuts revive interest in rent control legislation?

e What reasons does the article give to explain why owners of rental housing did not lower rents when taxes were lower?

f Why and how was rent control imposed on the rental market in Santa Monica?

g How were rents determined by the rent control board?

h What additional restrictions were imposed on owners of rental housing in Santa Monica?

i Would the resale value of rental buildings be higher or lower than otherwise because rent control was imposed?

j What is meant when economists say that rent control achieves a forced redistribution of income?

k Why were the tenants happy with rent controls and the rental-property owners unhappy?

l If rent control were to be continued for twenty years, how would it affect the following:

— Amount of new Santa Monica rental property that will be available;

— Quality of Santa Monica rental property available;

— Age of Santa Monica population in the absence of any other major economic changes.

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3-4

Consumer Protection: Public Benefit vs. Economic Efficiency

TIME REQUIRED Two class periods

RECOMMENDED GRADE LEVEL 11–12

MAJOR CONCEPTS Trade-offs and opportunity costs; broad social goals; trade-offs among goals; self-interest and personal values; fiscal policy

INSTRUCTIONAL OBJECTIVES Students will:

1 State which broad social goals usually underlie controversies about government regulation for the purpose of protecting consumers;

2 Articulate their own hierarchy of values as those values apply to government regulation for protecting consumers;

3 Take a position on a specific instance of government regulation and state the social goals behind that position;

4 Recognize that government regulation involves trade-offs among social goals.

RATIONALE There is considerable debate about government regulation that is concerned with consumer protection. The terms of the debate frequently take the form of a conflict between economic efficiency (government regulation is seen as impairing efficiency) and the benefits to the public or some sectors of the public. Another conflict is between the need for personal or environmental safety and economic freedom. It is important that citizens comprehend the issues involved, whether or not they participate in public debate on the matter.

The activities in this lesson are designed to give students a better understanding of the debate and the trade-offs involved between the alternative positions that may be taken. Because of the complexities of the subject, we strongly recommend that you read (or reread) Section IV of the JCEE's *Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts*, (second edition, 1984) which is the basis for Handout 3-4H. You may also wish to conduct or review Lesson 3-1 with your class before undertaking this lesson, unless your students have some background in the topics this lesson takes up.

MATERIALS Copies of Handouts 3-4A, 3-4B, 3-4C, 3-4D, or 3-4E for each group as described in procedure 2, below; one copy of Handouts 3-4F, 3-4G, 3-4H, and 3-4I for each student.

PROCEDURE

1 Start lesson by having students list the means with which government provides consumer protection. Indicate that there is currently considerable discussion about the amount of government regulation of business, especially in relation to consumer protection.

2 Split class into five groups. Each member of every group should receive one copy of the same handout from among the first five handouts, that is, either Handout 3-4A, 3-4B, 3-4C, 3-4D, or 3-4E. Each student should also receive a copy of Handouts 3-4F, 3-4G, and 3-4H.

3 Make sure students understand the definitions of the various social goals listed in Handout 3-4H so that they can answer the second part of Handout 3-4F.

4 Have students read their group's assigned handout on regulation individually and then work alone to complete Handouts 3-4F and 3-4G.

5 Have students in each group agree on a set of responses to the questions on Handouts 3-4F and 3-4G. One member of each group should be designated to report the group's responses to the entire class.

6 Reassemble the class and have each group's reporter state what position the author of the assumed handout took with respect to government regulation, which social goals seemed to be the primary basis of the author's argument, and how the author would probably react to the various regulations listed in Handout 3-4G.

RESPONSES ON HANDOUT 3-4F FOR SPECIFIC REGULATIONS MAY INCLUDE THE FOLLOWING:

— **Friedmann** (Handout 3-4A): Dominant broad social goal is the economic freedom of consumers and producers from government regulation. A second consideration is the effect an "added" safety requirement has on economic efficiency.

— **Weidenbaum** (Handout 3-4B): Dominant broad social goal is to maintain peak economic efficiency. Argues that government regulation

creates inefficiencies that hinder economic growth and full employment.

— **Schnepper** (Handout 3-4C): Dominant broad social goals are economic growth (drug industry was hampered), and the economic freedom of business and consumers (drug industry could not market some drugs and some consumers could not get drugs because of FDA regulation).

— **Spaeth** (Handout 3-4D): Dominant broad social goals are equity (protecting consumers from fraud and deception), as well as individual and national economic security (protecting citizens' health and protecting the economy from oil shortages and mismanagement of nuclear power facilities).

— **Lekachman** (Handout 3-4E): Dominant broad social goals are economic equity (preventing concentration of business that leads to monopoly conditions) and economic security (assuring the safety of automobiles and the environment as well as safeguarding the rights of women and minorities).

7 Distribute Handout 3-4I, which asks students to state their opinions regarding a number of existing or possible regulations. Have students share their answers and the reasons for them.

8 Discuss with class the choices that confront government when it considers whether or not to regulate something. Students should understand that any government decision about regulation involves trade-offs among broad social goals.

9 ASSIGNMENT: Have individual students or groups of students prepare a statement supporting or proposing a specific government regulation. They should carefully analyze the consequences of the regulation and the broad social goals that impel them to take the position they do. Encourage the students to do library research on the matter.

EVALUATION Evaluate caliber of student responses to the activities and their written reports.

Handout 3-4A

CONSUMER PROTECTION

The objective of safer products is obviously a good one, but at what cost and by what standards? "Unreasonable risk" is hardly a scientific term capable of objective specification. What decibel level of noise from a cap gun is an "unreasonable risk" to a child's (or adult's) hearing? The spectacle of trained, highly paid "experts" with ear muffs shooting cap guns as part of the process of trying to answer that question is hardly calculated to instill confidence in the taxpayer that his money is being spent sensibly. A "safer" bicycle may be slower, heavier, and costlier than a less "safe" bicycle. By what criteria can the CPSC [Consumer Product Safety Commission] bureaucrats, in issuing their standards, decide how much speed to sacrifice, how much weight to add, how much extra cost to impose in order to achieve how much extra safety. Do "safer" standards produce more safety? Or do they only encourage less attention and care by the user? Most bicycle and similar accidents are, after all, caused by human carelessness or error. . . .

When products enter the marketplace in the usual course of events, there is an opportunity for experiment, for trial and error. No doubt, shoddy products are produced, mistakes are made, unsuspected defects turn up. But mistakes usually tend to be on a small scale—though some are major, as in the recent case of the Firestone 500 radial tire—and can be corrected gradually. Consumers can experiment for themselves, decide what features they like and what features they do not like. . . .

[C]ompetition does not protect the consumer because businessmen are more soft-hearted than the bureaucrats or because they are more altruistic or generous, or even because they are more competent, but only because it is in the self-interest of the businessman to serve the consumer.

If one storekeeper offers you goods of lower quality or of higher price than another, you're not going to continue to patronize his store. If he buys goods to sell that don't serve your needs, you're not going to buy them. The merchants therefore search out all over the world the products that might meet your needs and might appeal to you. And they stand back of them because if they don't they're going to go out of business. When you enter a store, no one forces you to buy. You are free to do so or go elsewhere. That is the basic difference between the market and a political agency. You are free to choose. There is no policeman to take the money out of your pocket to pay for something you do not want or to make you do something you do not want to do.

SOURCE: Excerpted from *Free to Choose*, copyright © 1980 by Milton Friedman and Rose D. Friedman. Reprinted by permission of Harcourt Brace Jovanovich, Inc.

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Handout 3-4B

GOVERNMENT REGULATION

. . . [In 1978 the] regulatory tab was a staggering $96 billion—nearly four times the nation's annual trade deficit, three-quarters the national defense budget, or $450 for every man, woman and child in the United States. Of the $96 billion, the taxpayer footed the bill directly for $4.5 billion—the cost of setting up and running the regulatory agencies. Business and industry shelled out the remaining $91.5 billion for items ranging from paperwork (an absurd $25 billion) to "compliance" with financial, environmental, social and health-related federal demands. Passed on to the consumer in the form of higher prices, regulation added $2,000 to the cost of an average home, at least $22 to the average hospital bill, 7 cents to a pound of hamburger.

But that's only part of the picture. When other "invisible" costs are taken into account—the impact of business failures caused by overzealous regulation, of slipping export figures, of sagging productivity, of technological eclipse in fields once led by U.S. expertise—then the drain on the nation as a whole becomes incalculable.

Few would dispute the desirability of cleaner air and water or safer products in the marketplace. Nor would anyone deny that some regulation has been a direct response to past abuse. But costs like these suggest an irrational trend to regulation that is destructive rather than protective of our system.

As a former government official and as an economist who has spent the last four years [from 1975 to 1979] directing a massive study of the impact of regulation on our society, I have become acutely aware of what one might call "regulatorymyopia." Concerned with bits and pieces, the bureaucrats who last year [1978] filled 15,452 pages of the *Federal Register* with new regulations do not—in fact, cannot—see what they are doing to the economy. For the bulk of us, however, the effects of regulation run amok are all too clear.

SOURCE: Excerpt from "Time to Control Runaway Regulation," by Murray L. Weidenbaum, *Reader's Digest*, June 1979. Reprinted with permission.

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Handout 3-4C

FOOD AND DRUG ADMINISTRATION

Several years ago, Prof. Sam Peltzman of the University of Chicago examined the effects of the 1962 amendments to the Food, Drug and Cosmetic Act that stiffened FDA control over the introduction of new drugs. He found that the rate of innovation in the drug industry had been severely cut back, that 70 percent fewer completely new drugs were introduced between 1962 and 1970 on a per year basis than between 1950 and 1962, and even the introduction of these new drugs had been substantially delayed — by two years on the average. Peltzman concluded that the negative effects on national health of reduced drug innovation had exceeded the FDA's estimates of positive effects.

Research done by Prof. William Wardell of the University of Rochester, who compared the experience of Britain and the U.S. with new drugs since 1962, supported Peltzman's conclusion. According to Wardell, Britain, which has a much less rigid control over the marketing of new drugs, had a clear-cut net gain over the U.S. In some cases, this British gain and the implicit American loss was substantial.

In the case of one type of drug available in Britain and unavailable in the U.S. until five years later (Nitrazepam, a hypnotic), he states, "there may have been 3,700 deaths (including 50 children) from sedatives and hypnotics in the United States during this period. The corresponding figures for barbiturates alone are 1,890 deaths, including 45 children. Some of these deaths would have been prevented if a safe sedative would have been involved.

"From New Zealand figures for Nitrazepam usage, it would be realistic to assume that one-third of the deaths due to hypnotics would have been prevented if there had been earlier introduction, vigorous promotion, and official endorsement (rather than discouragement) of a Benzodiazepine or a comparable safe hypnotic.

"The point is obvious; introduction of a new drug that produced fatalities anywhere approaching this magnitude would be regarded as a major disaster, but the undoubted occurrence of deaths through failure to introduce a drug has so far gone unremarked. It would not take many examples of this type to show that earlier introduction of some new drugs more than counterbalance all the new drug toxicity of the past decade."

SOURCE: Jeff A. Schnepper "I Accuse the Federal Government of Failing the American People," *USA Today*, May 1979, page 12. Reprinted from USA TODAY (May 1979). Copyright 1979 by Society for the Advancement of Education.

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Handout 3-4D

GOVERNMENT REGULATION

. . . in light of the continuing revelations of corporate neglect or worse, much of the current protestation against government regulation rings awfully hollow. Virtually every environmental regulation, for example, has its genesis in some problem . . . that threatened the public and finally brought a legitimate public demand for government action. Regulation is not going to go away until the problems do. The way we regulate can *and must* be improved, but let us face the fact that a continued high level of government regulatory activity is *essential* to national goals of paramount importance — to controlling cancer and protecting health, to preventing consumer fraud and deception, to cleaning up air and water pollution, to reducing oil imports and conserving energy, to protecting us from improperly sited or mismanaged nuclear power facilities — the list, obviously, is very long.

SOURCE: Gus Speeth, "Environmental Regulation," *Vital Speeches of the Day*, March, 1980, page 390.

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Handout 3-4E

ECONOMIC DRAWBACKS OF DEREGULATION

Civilized communities and intelligent partisans of business concluded long ago that the health of market capitalism requires steady government attention to the context within which profits are maximized. If, as Milton Friedman and his disciples have insisted, corporations ought to follow no imperative other than single-minded pursuit of profit, it is all the more urgent that government define clearly the legal limits of that search. Steel, paper, and aluminum mills stopped their use of air, water, and the landscape as dumps for untreated emissions and chemical wastes only after Congress made these actions breaches of law. . . .

The benign face of capitalism has been justly celebrated. For two centuries, competitive markets have promoted growth and efficiency, and widened the vocational and consuming choices of most men and women. The other side of capitalism is less attractive. As Adam Smith sharply emphasized, businessmen aspire to monopoly, not competition. In our time, mergers increase average corporate size and limit rivalry. Crowds do not collude, rig markets, and set prices. Small groups can and do. Bigness *is* badness because bigness narrows the scope of competitive behavior.

Their organizational responsibilities, reinforced by the best of economic advice, impel business managers to cut costs, the better to enlarge profits. The designer of a new car does not intend homicide when he shaves a fraction of an inch off a metal shield or locates the gasoline tank in a position more vulnerable to a crash. When they were compelled to do so by force of law, automobile manufacturers incorporated in product planning considerations of safety, fuel economy, and environmental impact. As these mandatory legal requirements are relaxed, [manufacturers] will diminish their attention to such objectives. . . .

The completely predictable results of the deregulation crusade include reversal of limited progress toward parity by women and minorities, resegregation of many school systems, grave damage to public and worker health, and most ironic of all, less competition and more monopoly.

SOURCE: From *Greed is Not Enough: Reaganomics* by Robert Lekachman (New York: Pantheon Books — a Division of Random House, Inc., 1982), pp. 117 and 119. Reprinted with permission. Emphasis in original.

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HANDOUT 3-4F

Name _____ Class _____

Author of statement on regulation _____

Circle the broad social goals that underpin the author's argument: Economic freedom, economic efficiency, economic equity, economic security, full employment, price stability, economic growth.

Briefly summarize the author's position on government regulation:

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HANDOUT 3-4G

Name _____ Class _____

Directions: Indicate whether you believe the author of the statement that you read would agree or disagree with each government regulation listed by placing a check in the appropriate column. (If no indication is given, place a check in the "can't tell" column.)

Existing or Possible Government Regulation	Author Would Favor	Author Would Not Favor	Can't Tell
Testing of bicycles for safety			
Setting rigorous standards for drug safety			
Bringing private pension funds under government control			
Requiring air safety bags in all automobiles			
Setting rigorous safety standards for coal mines			
Insuring that matches are safe			
Inspecting and grading food products			
Controlling pollution generated by manufacturing plants			
Setting safety standards for nuclear power plants			
Requiring labels on food products that give information about ingredients and nutritional values			
Requiring health hazard labels on smoking materials			
Inspecting baby rattles for threats to infant safety			
Requiring extensive modifications to make lawnmowers safer			
Setting quotas for minority employment in businesses that sell to the federal government			

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Handout 3-4H

IMPORTANT BROAD SOCIAL GOALS IN AMERICAN SOCIETY

1 **Economic freedom** — includes freedom of consumers, workers, and producers to make choices in the marketplace.

2 **Economic efficiency** — relates to getting the maximum benefits from our limited productive resources.

3 **Economic equity** — pertains to what is considered fair or unfair about the effects of economic policies.

4 **Economic security** — pertains to the desire of people for protection against various economic risks over which they have little or no control, such as unemployment, bank failures, destitution in old age.

5 **Full employment** — prevails when all of an economy's resources are being utilized to capacity.

6 **Price stability** — the absence of inflation or deflation in the general price level.

7 **Economic growth** — the production of increasing amounts of goods and services over the long run.

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HANDOUT 3-4I

Name _____ Class _____

Instructions: Place the identifying letter of each regulation below into the category you believe it should fall along the continuum between absolutely essential and not essential.

Absolutely Essential _____ **Not Essential**

a Testing of bicycles for safety

b Setting rigorous standards for drug safety

c Bringing private pension funds under government control

d Requiring air safety bags in all automobiles

e Setting rigorous safety standards for coal mines

f Insuring that matches are safe

g Inspecting and grading food products

h Controlling pollution generated by manufacturing plants

i Setting safety standards for nuclear power plants

j Requiring labels on food products that give information about ingredients and nutritional values

k Requiring health hazard labels on smoking materials

l Inspecting baby rattles for threats to infant safety

m Requiring extensive modifications to make lawnmowers safer

n Setting quotas for minority employment in businesses that sell to the federal government

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4

THE INTERRELATIONSHIPS AMONG GOVERNMENT, BUSINESS, AND CONSUMER DECISIONS

CONSUMER ROLES

Most individuals play at least three roles in society: those of consumer, producer, and citizen. These roles are interrelated and when performed by many millions of people, have wide ramifications for the nation as a whole. One example is a shift in consumer buying from domestically made to imported goods or vice versa. Such a shift will change the pattern of the nation's production, alter the composition of employment, and affect the foreign exchange value of the dollar.

As consumers, individuals make decisions as to whether or not to purchase a good or service in the market. Those decisions will influence business decisions about the types and qualities of goods that will be offered in the marketplace in the future. As producers, how ably people perform in their jobs affects the price and quality of products as well as the level of people's earnings. As citizens, people vote to elect or reject candidates and political parties that will bring particular economic viewpoints and policies to the process of governing. As citizens, people also — either individually or through groups — seek to persuade elected officials to pursue one or a whole set of particular economic policies.

COUNTERVAILING POWERS

But individuals, powerful as they can be when enough of them personally make their opinions and sentiments felt in the larger society, at best constitute shifting and impermanent "coalitions." More usually, individuals face strong, permanent forces or institutions that, in the short or medium run, have a greater effect on economic — and social — policies than unorganized citizens or consumers can.

Three strong forces that affect economic policy are often cited: government, business, and organized labor. Sometimes two or all three of these groups may work in tandem. Quite commonly, however, there is some measure of tension or opposition about specific economic policies or proposed legislation between two of them or among all three; that is why they have been called "countervailing powers." Because of the frequency with which the actual or potential disagreements among them serve to offset or moderate the influence of each, and therefore prevent any one of them from continuously dominating economic or social policy, a healthy situation results in a democracy.

It is true that governments may exercise some control over business and labor by using the legislative and judicial arms of government at both the national and lower levels. However, business and labor — through lobbying, attempts to "educate" the public (an indirect form of lobbying), and by supporting particular candidates or parties in elections — can have a great deal of influence on what government does about the economy.

Government, business, and organized labor consist of individuals, and so it may be said that individuals are indeed supreme in a democratic society. Yet there is a question as to how much individuals think for themselves and how much their thinking reflects what the countervailing powers ask or educate them to think, especially in the short or medium run.

RELATED ECONOMIC CONCEPTS

There are a number of economic concepts that are basic to an individual's grasp of the entire economy. Economists group these concepts under the heading of "macroeconomics." The following discussion deals with four major aspects of macroeconomics.

Aggregate Supply and Demand

Aggregate supply is the total amount of goods and services (real GNP) produced by the economy during some stated period of time. The upper limit on aggregate supply is set by the productive capacity of the economy when all its resources are fully employed. While the economy's full-employment productive capacity is substantially fixed at any moment of time, past experience suggests that it normally grows as time goes on because of increases in the labor force, improved education and training of workers, more saving and capital investment, discovery of new resources, and technological advances. The full use of productive capacity is desirable although that does not always occur. One reason is that developed economies such as the U.S. economy are subject to

business cycles — more or less regular sequences of increases in total economic activity followed by decreases in total activity. In addition, major interruptions in supply accompanied by enormous increases in the price of important resources such as energy can slow economic activity down. An opposite effect is a speedup in economic activity though the spread of important innovations, as in the 1920s, when the use of automobiles, electric appliances, and radios became widespread.

Aggregate demand is the total amount of spending on goods and services in the economy during some stated period of time. There are two basic analytical approaches to the examination of aggregate demand. One is to view it as the sum of total consumer spending by individuals and households, investment spending by businesses for new plant and equipment and for additions to inventory, and spending for goods and services by government. A second approach is to view aggregate demand as reflecting the amount of money in circulation multiplied by the velocity of circulation. The velocity of circulation is defined as the number of times the average dollar (consisting of checkable deposits as well as currency) is spent on final goods and services. Velocity can be calculated by dividing the gross national product (GNP) by the average stock of money during the time period covered by GNP. The two views or approaches give the same answer.

Inflation and Its Cure

In recent years consumers have been very concerned about inflation. Inflation occurs when the general level of prices increase over a substantial period of time. In other words inflation is a continuing rise in the general level of prices. Although there is disagreement among economists as to which anti-inflation tools are the most effective, governments have several — to be used alone or in combination — with which they can end or at least slow inflation down.

Practically all economists agree that there is a connection between an economy's monetary policy and the rate of inflation that economy may experience. "Monetarist" economists believe that inflation is always and everywhere the result of increasing the economy's supply of money much more rapidly than the increase in the economy's output of goods and services. Other economists believe that other factors may contribute to inflation, including large increases in the prices of important commodities such as oil or major shortages in food supplies. Monetarists believe that the only long-term "cure" for inflation is to increase the supply of money only as fast as the economy grows. Other economists believe that — singly or in combination — raising taxes, decreasing or slowing the rate of government spending, encouraging increases in the supply of goods and services, putting government controls on prices and wages, are additional methods of halting inflation.

Curbing inflation has historically brought with it a slowdown or decline in the rate of economic activity. Such a slowdown or decline is commonly called an economic "recession." The slowdown occurs because curbing inflation usually involves lowering the rate of increase in aggregate demand and production or even bringing on a decrease in demand and production, which in turn puts downward pressure on prices and profits and increases unemployment. Hence, curbing or halting inflation has harmful side effects. That is one reason why some people and some governments are reluctant to take anti-inflationary steps in the early stages of inflation.

Saving and Investment

One of the decisions individual consumers make is whether to save or not save part of their available income. The factors that encourage saving are varied: the amount of possible interest or other earnings that can be obtained from saving (during inflation, the rate of interest must be higher than the rate of inflation); the extent to which deferring purchases is seen as desirable; the amount of money needed for future spending, e.g., for the education of children, for purchasing a dwelling, for use in retirement.

An economy benefits from the saving of individuals. Savings deposited in financial institutions, for example, can be channeled to business and individuals for use in expanding or improving facilities to produce goods and services. Thus, a nation's total amount of saving finances its investment. Economists call the process "capital" investment. Capital investment is vital to the economy's ability to produce. Someone who forgoes buying a good or service (i.e., saves) in effect makes it possible for the economy to acquire more or better production facilities. The acquisition of better production facilities helps to maintain or speed up the rate of increase in the productivity of the economy.

International Interdependence

International interdependence has been driven home to American consumers in recent years. They have experienced energy crises that originated abroad and import competition that seriously affected industries such as autos and steel. At times when the dollar increased in value with respect to other currencies, the cost to Americans of travel abroad has correspondingly decreased. Americans have also seen banks from abroad open branches in

this country and foreign retailers open many more stores here than ever before.

Sometimes, however, nations or groups within a nation try to block some of the international trade that is a consequence of interdependence because imports create competition for domestic interests. The chief interest groups that may seek to impede imports are labor groups attempting to protect the jobs of their members and businesses whose actual or potential markets are decreased or limited by competition. Imports can be limited by various methods, including the imposition of tariffs and quotas, giving special aid to domestic firms, administering customs procedures unfairly, and imposing special regulations about product standards. (Note that export industries may eventually suffer in a country that limits imports because limits on imports also limit the amount of foreign exchange businesses abroad may earn and use to purchase the exports of other countries.)

Another reaction to foreign competition is for a company to shift its production from one section of the country to another and ultimately out of the country entirely, if necessary. For example, the production of leather goods once was a prime industry in the northeastern section of the United States. Next, it moved to the South, where the cost of labor was lower. More recently foreign nations, such as Taiwan, have produced much of the leather goods U.S. consumers buy. As a result, today it is difficult for an American consumer to purchase something as "American" as a baseball glove that is produced in this country.

In short, international interdependence increases the interrelations and trade among nations. International interdependence arises because no nation is completely self-sufficient nor as efficient as all other nations in producing certain goods and services. Hence, the United States is economically dependent on other nations and they are dependent on us. In general, international interdependence means that particular goods and services are produced by those nations whose natural, capital goods, or human resources enable them to do so best or at least cost. Therefore, interdependence increases the vulnerability of nations to possible interruptions in production abroad that result from social, political, military, or economic developments there.

CONCLUSION

Becoming an intelligent, informed, and rational consumer is not an easy matter. There are many relationships between individuals and groups, between various groups, between regions, and between nations, to understand and to keep in mind. Difficult as this task may be, a better comprehension of the interdependent nature of economic relationships helps individuals to make better decisions as consumers, producers, and citizens.

4-1

The Money Crunch—a Corporate "Crisis"

The Story of the Big Wave Boat Company: A Parody of the Chrysler Corporation Crisis of 1979–82

TIME REQUIRED Three class periods plus two evenings for outside assignments. If time is limited, reduce the length of the lesson to one period by limiting the activity to the first four steps of Day One.

RECOMMENDED GRADE LEVELS Twelfth grade

MAJOR CONCEPTS Competition and market structure; circular flow of resources, products, and money payments; decision-making; supply and demand; role of government (public policy responses to market failure)

RELATED CONCEPTS Economic stabilization; fiscal policy; antitrust policy; public goods (environmental protection)

INSTRUCTIONAL OBJECTIVES Students will

1 Name the market structure studied in this lesson;

2 Specify the economic problems posed by the situation and the economic concepts and consumer considerations involved;

3 Suggest alternative actions that might be taken to alleviate the problems;

4 Recommend actions they think should be taken based on their understanding of the market system and the consumer's role in it.

RATIONALE The economic concepts listed above and the various consumer considerations involved will have been covered in the course previously. It will be important for the teacher to determine the extent to which each student can pick out those economic concepts germane to the task of analyzing the problems posed in this activity and proposing solutions to them. This activity will also present the teacher with an opportunity to determine how well students can do the following: (1) analyze a problem; (2) take a point of view on a controversial issue and defend that view; and (3) recommend solutions to a problem based on what they have been taught during the semester.

MATERIALS A copy of Handout 4-1A for each student; guidelines for the debate; magazines and newspapers containing articles and editorials based on similar problems (see articles dealing with the crisis of the Chrysler Corporation in 1979–82, for example); reference books in economics.

PROCEDURE

Day One

1 Distribute Handout 4-1A.

2 Give students 15–20 minutes to read and analyze the articles.

3 REQUIRED FOR ONE-DAY LESSON: OTHERWISE OPTIONAL. Lead a discussion of the various economic problems alluded to in the handout. (Allow 15–20 minutes.) During the discussion, write the basic economic concepts being discussed on the chalkboard.

4 OPTIONAL (recommended for one-day lesson, if time permits). Use some or all of the questions below for class discussion either at this point or at whatever point you deem the activity to be most useful.

a What are the issues in this problem?

b How would the company's bankruptcy affect its employees' personal lives?

c What type of market characterizes this industry? What would happen if one company went out of business?

d Do you think the government should step in to save the company? Why or why not?

e Why does one company president say that federal aid to one financially ailing company would present a basic challenge to the philosophy of the private enterprise system?

f Why might the United Boat Workers give the Big Wave Boat Corporation more favorable treatment than it would give other boat manufacturers?

g How would the concept of economies of scale apply to the resolution of this situation?

h If the Big Wave Boat Corporation fails, what effect would its failure have on the overall market structure? How might antitrust legislation be used to alleviate the situation?

i How did the planning and decision-making of the Big Wave Boat Corporation bring about its difficulties?

j How have the environmental protection laws had a detrimental effect on the corporation?

5 Review simplified rules and effective techniques of debating.

6 Divide the class into two or four groups (depending on its size) to prepare for a debate, to take place when the class next meets, on whether or not the federal government should extend aid to the financially distressed corporation. One group (or two, if there are four groups in all) will be for and one (or two) against government intervention. Participants will be asked to defend their side of the case as well as they can. Consideratioon must be given to the effect of their suggested solutions on consumers and on the market.

Day Two

1 Allow 20 minutes for members of the various groups to meet in order to discuss the case and determine the procedure the group will use in presenting its points of view in the debate. Designate those who are to take part in the debate.

2 Hold the debate (35 minutes).

3 Direct all members of the class to write, by the next session, a letter to President of the United Islands, expressing their viewpoint on the situation as a consumer and citizen. Students can take any position they desire in the letter, regardless of the stand of the debating group to which they belonged. Students should defend their positions as well as they can, emphasizing the effects their suggested handling of the problem will have on the economy, on consumers, and on consumer buying.

Day Three

1 Invite several students to read their letters to the class. Ask the rest of the class to comment on the procedures suggested by the letterwriters, with particular attention to the effects the procedures would have on the situation.

2 Ask students to select the letter that best presents the case for federal aid to the Big Wave Boat Company and the one that best presents the contrary position.

EVALUATION Rate students by

1 Their oral contributions during the various discussions;

2 The quality of the points presented in the debate and the quality of the rebuttals;

3 Their understanding of facts and ability to use facts in resolving problems, as revealed in the letters.

Handout 4-1A

THE STORY OF THE BIG WAVE BOAT COMPANY

INTRODUCTION TO THE NEWSPAPER ARTICLES

The United Islands (U.I.) is one of the world's most powerful and dynamic economies. The United Islands has a diverse economy that does much exporting and importing. It is a rich nation by most standards, and of late it has consistently been experiencing an unfavorable balance of trade.

One of the major industries of the United Islands is the boat manufacturing industry. The industry is an oligopoly in which five large corporations dominate the market. The inhabitants of the United Islands depend on boats as their major means of transportation. The federal government, which is located on Bulkhead Island, has invested heavily in improving waterways, inlets, harbors, etc., to facilitate both personal and business transportation. As a result, the United Islands has an up-to-date network of interconnected waterways.

The boat manufacturing industry employs many skilled and semiskilled workers. The United Boat Workers is a large and powerful union that has bargained effectively for its members for many years. Boat workers are among the highest paid workers in the nation and enjoy an outstanding fringe benefit package. Many related industries provide parts and materials for the boat manufacturers, and subcontracting is a common practice in the boat industry.

Profits of the boat companies generally have been excellent. Recently, however, imports of foreign boats and new government regulations have had a depressing effect on all five boat companies, especially the number three firm, the Big Wave Boat Company, which now finds itself in serious financial difficulty. In fact, it is on the verge of bankruptcy. The following newspaper articles describe the company's situation and the various solutions that have been proposed and debated.

Directions: Read the articles carefully, take a position for or against assistance from the U.I. government to the Big Wave Company, and be prepared to defend your position.

Article 1
Big Wave Posts Its Worst Quarter

THE STRAITS (IPI) — In its worst quarterly performance in history, Big Wave Boat Company yesterday reported a second quarter 1979 loss of $206.1 million — more than the company's entire 1978 deficit — and asked government help to regain stability.

On Bulkhead Island, the Treasury Department said it is studying the financial situation of the nation's third largest boat maker in advance of a ruling on the firm's request for $1 billion in tax relief.

Big Wave's disastrous showing was blamed on slumping sales of its big boats, which are less fuel efficient than its competitors' boats, and on government regulations, which Chairman John Rudder said cost twice as much for Big Wave to meet than for its larger competitors.

Big Wave's persistent sales lag has led to speculation among analysts that a merger with Folkboats may be in the offing, a rumor both companies have denied.

Mr. Rudder said the firm was hit by two events over which it had no control. "First, the United Islands have managed to develop a hysteria about the adequacy of gasoline supplies that hurts the markets in which we're strongest. And on top of that, we are now in a recession that makes all our problems worse.

"You couldn't write a tougher scenario for the third-largest boat company. We're in a tough period, but we intend to make it," Mr. Rudder said. Rudder said that the company has lobbied in Bulkhead for an accelerated tax credit plan that would give it $1 billion in tax relief in 1979 and 1980.

He also said the company wants to delay the application of federally mandated exhaust emission requirements for two years. Both the tax relief and the emission control waiver would require special federal legislation.

Mr. Rudder said government regulation cost Big Wave $620 per boat compared with $340 per boat for the General Boats Corporation, which he said is able to spread mandated costs over a greater amount of production.

Big Wave President Lee Barracudo said the com-

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pany has not scrapped plans to spend $1 billion a year during the next two years to produce the small, fuel-efficient boats that are widely accepted by the public.

Big Wave, traditionally a leader in sales of light freighters and recreational boats, also saw that market virtually collapse. In the second quarter, Big Wave's domestic boat sales were down 23.2 percent from last year, while freighter sales declined 53.8 percent. The company reported worldwide dollar sales in the second quarter at $3.2 billion, down 13.6 percent from $3.7 billion in the second quarter of 1978.

The Treasury Department said it has been monitoring Big Wave's financial situation in the past several months, and is concerned about its possible impact on the entire economy as well as on the employees of Big Wave and its suppliers.

Article 2
Big Wave Aid Plea Getting Scrutiny

BULKHEAD (IPI) — Congress should determine that the Big Wave Boat Company is doing everything possible to help itself before considering a billion-dollar tax subsidy or loan guarantee, the chairman of the House Banking Committee said Wednesday.

But Big Wave got a somewhat more sympathetic response from the chairman of the Senate Finance Committee, Russell Shore. He may support such a request because, he said, "the alternative for Big Wave is going out of business."

"Before Congress considers a billion dollar tax subsidy or loan guarantee for Big Wave like that Congress once extended to an aircraft firm, members need to be convinced that Big Wave is doing everything possible to help itself," said Senator Shore. "Congress would also want to be convinced that the company has definitive and realistic plans for getting back on solid ground."

He said Big Wave's announcement "of its enormous current and prospective losses raises a serious question concerning the continued viability of this major corporation, the fate of its 250,000 employees, and the effects on their major suppliers and their employees."

Senator Donald Rower, who represents the Straits, said he met with Treasury Secretary-designate G. William Mooring in Washington and discussed Big Wave's situation.

In the end, the fate of the proposal, which is sure to face extensive congressional scrutiny, is likely to depend on convincing Congress that Big Wave had done all it could to help itself and that the consequences of a bankruptcy on the U.I. economy would be severe.

Article 3
GB Chief Fights Aid to Big Wave

THE STRAITS (IPI) — Thomas A. Anchor, chairman of the General Boat Corp., said Thursday that he opposes special government financial aid to the Big Wave Boat Company. He urged instead a complete review of federal regulations that have forced heavy spending by the boat industry.

The GB chief executive said that Big Wave's request for up to $1 billion in federal aid "presents a basic challenge to the 'private enterprise' philosophy of the United Islands."

Mr. Anchor also said that GB now expects new passenger boat sales in the United Islands to fall to 10.8 million units for the 1979 model year ending Sept. 30, and that the figure would probably be the same for the calendar year. About 20 percent of these boats, he estimated, would be foreign-built. Previously, the company had persistently maintained that total new boat sales this year would reach 11.5 million units, considerably more than the forecasts of its competitors.

In other developments Thursday regarding Big Wave's financial plight:

— Big Wave President Lee A. Barracuda said he plans to meet with United Boat Workers President Douglas A. Floater and the union's negotiating team at a special bargaining session on Friday, a meeting union officials called unprecedented.

— Big Wave's board of directors, meeting in New Dock, voted to omit payment of a third-quarter dividend on its common stock.

— Big Wave stock fell again on the New Dock Stock Exchange.

Article 4
Will the Rubber Band of the Boat Industry Snap Back?

THE STRAITS (IPI) — Crisis in Big Wave is almost as familiar around the straits as new-model time, labor ne-

gotiations every three years, or the up-to-the-second waterway billboards giving the year's production figures.

"Big Wave is like a rubber band. You stretch it, and it snaps back. But each time it's a little weaker. And you know that someday the rubber band is going to break," a staff member of the United Boat Workers said not long ago.

Big Wave suffered a loss last year, lost $53.8 million in the March quarter, and an industry-record $206 million in the second quarter. Wall Stream predictions of the loss for the year start at $500 million, a dismal prospect that has prompted the boatmaker to plead for $1 billion in loan guarantees from the government. Along with that sensational request, on Friday Big Wave asked the United Boat Workers to freeze wages and benefits for two years.

Some have argued that Big Wave wouldn't be snared in the coils of the latest crisis if it were selling more boats. Figures for late July show that Big Wave is still having sales problems.

July sales figures, released Friday, showed that Big Wave's total boat sales declined 22.7 percent from the same period last year.

"The key issue is their market position, of course," says Joan Brook, head of the National Waterway Traffic Safety Administration.

"The economics of this business never changes," Big Wave President Lee Barracuda said in May. One percent of a market that totals 11 million boats a year "is still worth about $200 million net to us per quarter. We need one more percentage point, and we aren't getting that yet."

All manufacturers have been pummeled by the effects of fuel shortages. Big Wave's market position is on the way to becoming the worst since World War II. For the first six months of the year, Big Wave's share of the total boat market was 9.2 percent. Applying Barracuda's formula, Big Wave would avoid a loss this year if it were keeping its 1976 share of 10.2 percent.

The company has always been more vulnerable than others in the industry to recessions. Though profitable in 1960 and 1966, it was in the red in 1957 and 1958, and again in 1970, 1974, and 1975.

Up to now Big Wave has been able to cut expenditures for new facilities during slumps. For example — though plants cannot be turned off like water taps because it now takes three years from the time the necessary equipment is ordered to produce a new boat — such spending fell from $125 million in 1957 to $63 million in 1959, and from $331 million in 1973 to $164 million in 1975.

Now, however, Big Wave says it must spend more in order to meet government pollution and fuel economy standards. What would be normal new-product expenses of $500 million this year and next will be about doubled to meet the standards, the company says. That is the company's justification for asking the government to help, since Big Wave is likely to produce relatively few boats over which to spread the additional expenditures to meet the government requirements.

Article 5
Union Nixes Big Wave Wage-Freeze Appeal

THE STRAITS (IPI) — The Big Wave Boat Company has asked the United Boat Workers for a two-year freeze on wages and benefits for some 124,000 Big Wave employees who are covered by the union contract. The union rejected the appeal, but scheduled a meeting of its Big Wave council for next Thursday to discuss what financial relief labor might be willing to give the company.

Lee A. Barracuda, Big Wave's president, appealed Friday morning for the two-year wage freeze during an unusual appearance at a union bargaining session with Douglas A. Floater, the UBW president, and a rank-and-file union negotiating committee. The meeting lasted an hour and 40 minutes.

"Because of the complexities and short-term uncertainties of the boat market and the temporary financial stress being experienced by Big Wave," Barracuda said in a statement before he entered the union meeting, "I felt it was in the best interests of all concerned for me to come here personally to outline the details of the company's present position and our future plans to restore us to profitability."

Besides announcing that the union had turned down the request, Mr. Floater reasserted his position that the government should make a $1 billion investment in Big Wave through the purchase of stock in the company rather than give direct financial aid. Mr. Floater also strongly criticized Thomas A. Anchor, chairman of the General Boat Corp., for his statement Thursday opposing any special government aid to Big Wave. Mr. Anchor said such a move would pose a basic challenge to the private enterprise system.

Mr. Barracuda had requested the meeting with the UBW's bargaining committee, including Mr. Floater, to discuss the company's faltering

status. The company and the union were already negotiating a new contract to replace a three-year pact that expires at midnight Sept. 14, but the presence of top leaders from both sides of the table during preliminary talks is unusual for the industry.

Meanwhile, in brighter news for the boat industry, sales of boats in the United Islands were brisker in early August than in several weeks, prompting hopes that the market is regaining strength after a four-month slump.

Article 6

Old-Fashioned Hard Sell Cuts Dealer's Backlog

LENOX SHORES (IPI) — "There is no entertainment, no free soft drinks here. . . . We are just wheeling and dealing in boats."

Fred Brill, the 36-year-old president of Dell Boats, was sitting under a canopy at Lenox Shores, where he and other dealers were starting one of the biggest "weekend inventory reduction" sales ever held.

As Mr. Brill put it, financially troubled Big Wave has gone back to the old-fashioned hard sell to cut its nationwide dealer backlog of more than 88,000 craft.

To pave the way for the special weekend sale, company dealerships mailed out 120,000 "sneak preview" invitations to prospective buyers to come in on Wednesday and Thursday nights and trade in their old boats for one of the crafts that covered the docks. In addition, there were close to 300 craft in a nearby staging area to resupply those sold by the various dealers who were using spotlights — and a strong media campaign — to attract customers on both nights.

"This is the fifth sale of its type we've held in the islands," explained Mel Hew, zone manager. "Next Wednesday through Friday, we will have the same kind of sale at the Century Quay Mall."

Mr. Hew said 154 boats and other Big Wave craft were sold to invitation-only customers during the first four hours of the sale, which started on Wednesday night. The high initial sales gave credence to the upbeat scenario about the local economy and boat sales offered by Gill Oat, president of Marietta Boats. "There is no recession!" declared Mr. Oats, whose dealership calls itself the largest in the U.I. He added that the buying public, as it did in 1974–75, is returning to the larger, more comfortable boats now that the fuel situation is more stable."

Mr. Brill, whose family operates six other dealerships, says the government and the islands really can't afford to have Big Wave go broke. "If they don't give the company some financial help, they'll have to pay out more in unemployment compensation and take in less in taxes. And just think of the Big Wave dealers and suppliers that will go under!"

Article 7

Big Wave: We Are Not Going Broke

NEW DOCK (IPI) — The chairman of the Big Wave Boat Co. asserted Wednesday that his company was not about to go bankrupt even though it had asked for $1 billion in federal aid as its only long-term hope for survival as a full-line boat maker.

The chairman, John Rudder, reiterated his belief that the government would provide the company with some measure of relief from the costs of federally mandated fuel mileage and air-pollution standards. He contended, however, that no matter how the government in Bulkhead responded, the company's lines of credit were adequate to meet short-term cash needs. "The question we are addressing in Bulkhead is the longer-term situation," Mr. Rudder said in an interview shortly before he met with the executive committee of the company's board of directors here in New Dock.

Last Tuesday, Big Wave reported its largest quarterly loss ever: $206.1 million on sales of $3.15 billion in the second quarter of 1979. That, coupled with a first-quarter deficit of $53.8 million, means the company has already lost more money in this year's first half than in all of 1975, when it posted its largest previous loss, $259.5 million. By some estimates based on sales trends since the second quarter ended, Big Wave may lose up to $600 million this year. These disclosures have raised fears that Big Wave might go bankrupt and shake up the overall economy of the islands.

Mr. Rudder appeared to be treading a thin line. Turning to the government for assistance is considered an extreme step, and Big Wave must show Congress that its request is its last resort. Mr. Rudder indicated that the company needed aid if it was to remain fully competitive in the boat industry.

On the other hand, he emphasized that its current problems, especially financing its own inventory and a supply at dealers that is still excessive, were simply, as

he put it, "an interim situation" resulting from fuel shortages that have caused sales to dry up. He noted that both the General Boat Corp. and the Fast Boat Co. also had large stocks of boats on hand.

It is no secret that the boat industry is going through as difficult a sales period as it has faced since the 1974–75 recession, when sales of big boats virtually evaporated. And the government regulations have exacerbated these problems. Rudder has constantly stressed that the cost of compliance with these standards hurt Big Wave more than its competitors since the company produces fewer boats over which to spread those costs.

Saying that the company "had borrowed the limit," Mr. Rudder forcefully stated that management had done everything prudently possible, short of shrinking the company's size, before turning to the government. Nor can the company hope to borrow money without government guarantees, "not with the kind of losses we are running," Mr. Rudder said.

Article 8
S & P Cuts Ratings on Big Wave Issues

NEW DOCK (IPI) — Stoddard & Port's Corp. yesterday lowered its ratings on two Big Wave Company bond issues, citing the loss-plagued boat maker's "financial problems" stemming from slow boat sales and high inventories. The action by Stoddard and Port followed by one day a decision by Portside Investors Service Inc. to downgrade some Big Wave credit ratings. "In view of the severity" of Big Wave's problems, Portside lowered its rating on the Big Wave Consumer Credit Corporation commercial paper to B from A-2.

4-2

Tighten The Reins—or Loosen Them

A Monetary-Control-Tool Simulation

TIME REQUIRED One class period (preceded by a study of monetary policy, the tools of monetary control, and the role of the Federal Reserve System).

RECOMMENDED GRADE LEVEL 9–12

MAJOR CONCEPTS Role of government; aggregate demand; money; monetary policy; price structure

INSTRUCTIONAL OBJECTIVES Students will

1 Learn the six basic monetary control actions that can be taken by the Federal Reserve System (the Fed);

2 Describe the different effects on banks when each of the monetary control actions is taken;

3 Explain the impact on money supply and on business and consumers when bankers respond to monetary control actions of the Fed;

4 Understand how prices are affected when the money supply is increased or decreased;

5 Explain circumstances under which the Fed might choose to take certain kinds of monetary control action.

RATIONALE

The Fed is a quasi-independent government agency whose major responsibility is to control the rate of growth of the U.S. money supply by adjusting reserve requirements or the discount rate and through open market operations (i.e., buying or selling government securities in the open market). While consumers hear or read about such actions in the news — actions often described as tightening or loosening the reins on the money supply — the public's understanding of how the economy is actually affected by them appears to be minimal at best.

Teaching the students about the monetary policies of the Fed is a challenge to most teachers. Through this simulation students learn the following:

1 Why the Fed takes certain actions regarding money supply;

2 What subsequently happens at banks;

3 How bank actions affect business and consumers;

4 How the amount of money available to consumers affects aggregate demand and prices in the marketplace and may result in either inflation or deflation;

5 What the chain reaction (or "ripple effect") of monetary policy is.

The discussion that follows the simulation is an essential part of the activity. The discussion draws out important points students should understand and develops a deeper comprehension of what has taken place in each cycle of the simulation. Others matters, such as the psychology of consumers regarding spending and saving, can also be emphasized. Teachers should also stress that in the complex real world, the direction Fed policy should take is often not as simple to determine nor are the results as clear and effective as in the simulation.

MATERIALS

The materials needed for this simulation can easily be made by teachers and/or students using 4" × 6" index cards and manila file folders.

1 Level I cue action cards. These 4" × 6" cards give signals and directions to participants (see page 00). The use of different colors of cards for each group helps to keep each group's cards readily identifiable. Distinguish Side One of each card from Side Two by, e.g., marking one side with a legible sign, such as a big checkmark, or a 1.

2 Level II option sheets. The Fed, bankers, and consumers use these sheets in place of the cue cards. (See pages 102 and 103–105.)

3 Display cards (public announcement signs). Print, type, or hand letter the announcements on manila file folders. The signs are used by each participant group after an announcement is made concerning the action taken. The cards, or signs, can be held up by one of the participants in each group or mounted in holders which can be made for these signs. Suggested text for the announcements appears on page 102.

PROCEDURE

1 Preliminaries

Before beginning the simulation, make sure that students understand the Federal Reserve System and the tools of monetary control it uses. You should also include an explanation of the concepts students will need to know for the simulation and the objectives of the lesson. Students who are to participate as observers should receive copies of the evaluation-discussion questions for review before the simulation begins.

The simulation requires five groups of players. The groups may be of any size, although three persons per group tends to be best. Each group should designate one (or more) card reader(s), public announcer(s), and sign displayer(s).

2 Instructions to Participants

After a general explanation of what will take place, emphasize that the simulation will be a learning process for everyone, and that no one will be penalized or should feel embarrassed if an error is committed. After the participants are seated, give cue cards to each group, and when the observers are ready, give the following instructions:

"In this simulation, you will play one of five roles: newscaster, official of the Federal Reserve System, banker, consumer, or supplier of goods and services. Each group has its own set of cue cards. Take a few minutes now to read the cards and ask questions about anything that is not clear to you. When you are ready to begin, arrange the cards so that all members of the group can read each of the cues. When all groups are ready to go, we will signal the announcer to begin the simulation.

"The group should select the appropriate card and one person should be responsible for making sure that the rest of the group knows exactly what it says. A second person should be responsible for displaying the appropriate sign.

"You will be involved in a sequence of activities, and it is important for you to know where you come in. Here is how the sequence goes:

a The newscaster selects a card and reads the public announcement.

b The officials of the Fed listen to the economic-condition announcement and decide which card to select (note the cues on side one of each card); they then make an announcement to the bankers.

c The bankers listen to the Fed announcement and select the card from which to make an announcement to the consumers.

d The consumers listen to the bankers' announcement, take their cue card, and make a loan request from the bankers (if a loan can be made).

e The bankers acknowledge and approve the consumers' request.

f The consumers then note the bankers' action and make a request to buy goods and services from the suppliers.

g The suppliers note the request, select the appropriate card, and announce to the consumers the quantity purchased and the price of the goods and services bought.

h The suppliers then announce the effect on business conditions. When suppliers have made the announcement of business conditions, the cycle is ended. Six complete cycles constitute a full simulation."

3 How Participation Works

Level I participation uses the cue cards for all action in the six cycles. Although mistakes can be made if participants misunderstand a cue or select a wrong card, the simulation is basically a mechanical chain of events. It does, however, illustrate in a drumatic fashion what takes place in the economy when the Fed uses its tools of monetary control. When each cycle is concluded, the participants and observers can discuss what happened and why it happened and what the effect was on the economy. If mistakes are made, the nature of the error and how it affected other actions should be discussed.

The first cycle of activity often is a bit slow and sometimes cumbersome for some of the participants. After they become more accustomed to the cards and how to select and read them, cycles move along quite smoothly and quickly. Some participants will learn how to anticipate the actions of groups whose card selections preceded that of their own group.

Level II uses the same public announcement cards and the same sequence of activities as in Level I. However, the Fed, bankers, and consumers use the option sheets instead of the one cards.

4 Evaluation and Discussion

Observers and participants should be asked to comment on what took place and to ask questions about any part of the simulation. The instructor normally will lead and stimulate this discussion.

A set of evaluation-discussion questions can be used. Sample questions and answers are provided in the next section.

When sufficient discussion has taken place and the class has achieved the desired perspective and

understanding of the cycle, have the groups remove the displayed signs and get ready for the next cycle. (Change the composition of the groups or their assigned roles if you think it desirable.) Completion of a minimum of three cycles is necessary in order to illustrate the different control tools and their impact.

5 Sample evaluation and discussion questions

The experience and background of the participants and observers will affect the nature of the discussion. Emphasize (a) that the simulation demonstrates what is *supposed* to take place in the economy and the marketplace and, (b) that the action is based on what bankers, consumers, etc., do *as a whole* or on *average*, and not on what individual banks, consumers, etc., may do. Even Fed policy is determined by the majority vote of a group of individuals. Discussion can bring this out, of course, and it often does; e.g., an individual bank may be able to lend money at somewhat lower rates than other banks because that bank has more money available to lend.

You may have to stimulate discussion by making a few observations or posing specific questions such as those below (the questions can be prepared for distribution to observers to help get the discussion going):

a Why did the Fed officials take the action they did? What other action could they have taken? Were the reins "tightened" or "loosened" by their action? *(The table below summarizes the tools of monetary control of the Federal Reserve System and their intended impact on the economy.)*

b Why did the bankers respond as they did?

c What effect did the action of the bankers have on the amount of money the consumers could spend? How did this affect the demand for and price of goods and services in the marketplace?

d What other actions to fight inflation or recession is it possible to take in the U.S. economy?

e What are some of the immediate and long-run effects of the monetary policies illustrated in this simulation on the economy and on consumers?

The Impact of Fed Policy

Federal Reserve Policy on	The Fed's Reins	Money Supply	Aggregate Demand	The Economy
Reserve requirements				
Increase	Tighten	Decreases	Decreases	Cools
Decrease	Loosen	Increases	Increases	Heats
Discount rate				
Increase	Tighten	Decreases	Decreases	Cools
Decrease	Loosen	Increases	Increases	Heats
Open market activity				
Sell	Tighten	Decreases	Decreases	Cools
Buy	Loosen	Increases	Increases	Heats

CUE CARDS

FOR THE NEWSCASTER (six cards):

Side One: **Tighten the Reins** (No. 1)
Side Two: Make this announcement for all to hear: **Ladies and Gentlemen: The economy is heating up, the money supply is increasing, and inflationary pressures appear to be mounting because the Consumer Price Index has gone up again.**

Side One: **Loosen the Reins** (No. 2)
Side Two: Make this announcement for all to hear: **Ladies and Gentlemen: The money supply is hardly rising, business activity has sagged, and the economy appears to be weakening.**

Side One: **Tighten the Reins** (No. 3)
Side Two: Make this announcement for all to hear: **Ladies and Gentlemen: The economy is heating up. The increase in the money supply has speeded up, public opinion polls report that consumers consider high and continuing inflation as being the nation's most serious problem.**

Side One: **Loosen the Reins** (No. 4)
Side Two: Make this announcement for all to hear: **Ladies and Gentlemen: The economy is cooling off, the money supply is declining, and unemployment is increasing as the economic downturn continues.**

Side One: **Tighten the Reins** (No. 5)
Side Two: Make this announcement for all to hear: **Ladies and Gentlemen: The economy has heated up, the money supply has increased substantially, and inflation is running out of control.**

Side One: **Loosen the Reins** (No. 6)
Side Two: Make this announcement for all to hear: **Ladies and Gentlemen: The economy has cooled off, the money supply is down substantially, and signs of a recession have begun to appear.**

FOR THE OFFICIALS OF THE FEDERAL RESERVE SYSTEM (six cards):

Side One: Use this card if **inflationary pressures mount and the Consumer Price Index rises again.**
Side Two: Read this to the other Fed members: **We should raise the discount rate to 14% per year to restrain the growth of the money supply.** Make this announcement to the bankers: **Attention bankers: The discount rate has been raised to 14% per year.**

Side One: Use this card if **Business is sagging and the economy appears to be weakening.**
Side Two: Read this to the other Fed members: **We should lower the discount rate to encourage an increase in the money supply.** Make this announcement to the bankers: **Attention bankers: The discount rate has been lowered to 10% per year.**

Side One: Use this card if **Consumers consider inflation the nation's most serious problem.**
Side Two: Read this to the other Fed members: **We should increase reserve requirements to 15% to restrain the growth of the money supply.** Make this announcement to the bankers: **Attention bankers: Your reserve requirements have been raised to 15%.**

Side One: Use this card if **Unemployment is increasing and the economic downturn continues.**
Side Two: Read this to the other Fed members: **We should lower reserve requirements to 10% to encourage an increase in the money supply.** Make this announcement to the bankers: **Attention bankers: Your reserve requirements have been lowered to 10%.**

Side One: Use this card if **inflation is out of control.**
Side Two: Read this to the other Fed members: **We should begin selling U.S. government bonds on the open market to halt the growth of the money supply.** Make this announcement to the bankers: **Attention bankers: We are selling bonds on the open market.**

Side One: Use this card if **Signs of a recession have begun.**

Side Two: Read this card to the other Fed members: **We should begin buying U.S. government bonds on the open market to try to increase the money supply substantially.** Make this announcement to the bankers: **Attention bankers: We are buying bonds on the open market.**

FOR THE BANKERS (six cards):

Side One: Use this card if the **Discount rate is raised.**

Side Two: Read this to the other bankers: **We now must pay higher interest on the money banks borrow from the Federal Reserve System. Therefore we need to raise the interest rates on the loans we make.** Make this announcement to the consumers: **Consumer loans are available at a percentage rate that has been raised to 18% per year.**

Side One: Use this card if the **Discount rate is lowered.**

Side Two: Read this to the other bankers: **Our banks can now borrow money from the Federal Reserve banks at a reduced interest rate. We can therefore make loans to consumers at a lower rate.** Make this announcement to the consumers: **Consumer loans are available: The annual rate is raised to 14% per year.**

Side One: Use this card if the **Reserve requirement is raised.**

Side Two: Read this to the other bankers: **We will now have less of our money to lend since we must hold back more in our reserves. We must therefore raise interest rates on loans to consumers.** Make this announcement to consumers: **Consumer loans are available: The annual rate is raised to 20% per year.**

Side One: Use this card if the **Reserve requirement is lowered.**

Side Two: Read this to the other bankers: **We can now loan out more of our money since we must hold back less as a reserve, and this will encourage consumer loans.** Make this announcement to the consumers: **Consumer loan rates have been lowered to 12% per year.**

Side One: Use this card if the **Federal Reserve is selling U.S. government bonds on the open market.**

Side Two: Read this to the other bankers: **The Federal Reserve is selling bonds to us, and our purchases are causing our available funds to decline. Therefore we must cut back on our pace of lending to consumers.**

Side One: Use this card if the **Federal Reserve is buying U.S. government bonds on the open market.**

Side Two: Read this to the other bankers: **The Federal Reserve is buying bonds and our deposits are therefore rising. Since we now have increasing money assets, we should encourage consumers to borrow money.** Make this announcement to the consumers: **Plenty of money for loans to consumers is available, and the rate is only 8% per year.**

FOR THE CONSUMERS (four cards):

Side One: Use this card if bankers announce **Consumer loans at 8% per year.**

Side Two: Read this to the other consumers: **At the low 8% rate per year, we can afford to borrow $200.** Make this request of the bankers: **We want to borrow $200 at the 8% rate.** After the loan is approved, read this to the other consumers: **We have $200 in our demand deposit (checking) accounts and $200 in coin and currency, so things are looking good. We have confidence in our economy's future. So we will spend $400.** Make this request of the suppliers: **We want to buy $400 worth of goods and services.**

Side One: Use this card if bankers announce **Consumer loans at 12% (or 14%) per year.**

Side Two: Make this request of the bankers: **We want to borrow $150 at the 12% (or 14%) rate per year.** After the loan is approved, read this to the other consumers: **We now have $150 in our demand deposit (checking) ac-**

counts plus $200 in coin and currency. The economy is looking better, so we can spend the $350 we have on hand. Make this request of the suppliers: **We want to buy $350 worth of goods and services.**

Side One: Use this card if bankers announce **Consumer loans at 18% (or 20%) per year.**

Side Two: Read this to the other consumers: **We can afford to borrow only $100 at interest rates of 18% to 20% per year.** Make this request of the bankers: **We want to borrow $100 at the 18% (or 20%) rate.** After the loan is approved read this to the other consumers: **We now have $100 in our demand accounts plus $200 in coin and currency. Since the economic outlook is not too good, we should save $20 of our money and spend $280 on goods and services.** Make this request of the suppliers: **We want to buy $280 worth of goods and services.**

Side One: Use this card if bankers announce: **We must cut back on our pace of lending to consumers.**

Side Two: Read this to the other consumers: **There is not much we can do: Since we cannot borrow very much money, we will have to depend mostly on the cash and currency we have on hand.** Make no announcement to the bankers. Make this anncuncement to the other consumers: **We are able to borrow very little money: Things do not look very good to us. We still need some goods and services, but we will have to save 10% of our money and spend only $180.** Make this request of the suppliers: **We want to buy $180 worth of goods and services.**

FOR THE SUPPLIERS (four cards):

Side One: Use this card if **Consumers request a purchase of $180 worth of goods and services.**

Side Two: Read this to the other suppliers: **Demand for our product is low; times are rough. We have lowered our prices to $20 a unit but demand is just not there and profits are poor. We have no choice but to cut back on our work force.** Make this announcement to consumers: **You have purchased 9 units of goods and services at a price of $20 per unit.** Then make this public announcement: **Business is down; profits are poor; layoffs are necessary.**

Side One: Use this card if **Consumers request a purchase of $280 worth of goods and services.**

Side Two: Read this to the other suppliers: **Demand for our product is not good; we have lowered our price to $28 per unit but we can't make much of a profit at that price. We must cut back on production.** Make this announcement to consumers: **You have purchased 10 units of goods and services at a price of $28 per unit.** Make this public announcement: **Profit picture is gloomy; it is necessary to cut our production.**

Side One: Use this card if **Consumers request a purchase of $400 worth of goods and services.**

Side Two: Read this to the other suppliers: **Demand for our product is high and we can command a higher price. We can sell our goods and services at $33.33 per unit and expand our plant.** Make this announcement to the consumers: **You have purchased 12 units of goods and services at a price of $33.33 per unit.** Then make this public announcement: **Our profits are up; business is good; we are increasing production and expanding our plant.**

Side One: Use this card if **Consumers request a purchase of $350 worth of goods and services.**

Side Two: Read this to the other suppliers: **Demand for our product is stabilized and is quite encouraging. We have set our price at $31.80 per unit and can make a fair profit at that price level. We are also in a position to add to our work force.** Make this announcement to the consumers: **You have purchased 11 units of goods and services at $31.80 per unit.** Make this public an-

nouncement: **Business is good and profits are improving. We are adding to our work force and therefore are looking for new employees.**

PUBLIC ANNOUNCEMENT SIGNS (match up with appropriate cue cards)

For the Newscaster

The economy has cooled off. Money supply is down. A recession is on the way!

The economy is heating up. Money supply is at a high level. A consumer revolt is growing due to rising inflation!

The economy is cooling off. Money supply is low. Unemployment is increasing. Economic downturn continues!

The economy is weakening. Money supply is dropping. Business is sagging. Economy looks bad!

The economy has heated up. Money supply increase is substantial. Inflation is out of control!

The economy has heated up. Money supply is up. Inflationary pressures: CPI rises rapidly!

For the Federal Reserve Officials

Discount rate for banks is raised to 14%.

Discount rate for banks is lowered to 10%.

Banks' reserve requirement is raised to 14%.

Banks' reserve requirement is lowered to 10%.

Bonds will be bought through open market operations.

Bonds will be sold through open market operations.

For the Bankers

See us today — loans at history-making low 8% per year.

Consumer loans available at 18%.

Consumer loans available at attractive annual rate of 12%.

Consumer loans now being made at only 14% annually.

Consumer loans available at 20% annually.

Sorry!, no consumer loans today.

For the Consumers

Borrowed $200 — spent $400 on goods and services.

Borrowed $150 — spent $350 on goods and services.

Borrowed $100 — saved $20 — spent $280 on goods and services.

Could not borrow — saved $20 — spent $180 on goods and services.

For the Suppliers

Sold 12 units of goods and services at $33.33 per unit — profits are up. Increase in production. Expansion!

Sold 11 units of goods and services at $31.80 per unit — profits are improving; adding to workforce.

Sold 10 units of goods and services at $28 per unit — profit picture gloomy. Production cutbacks necessary.

Sold 9 units of goods and services at $20 per unit — profits are poor. Layoffs are necessary.

OPTION SHEETS (For Level II Activity)

Option sheets 1, 2, and/or 3 may be used in place of the cue cards for the Federal Reserve officials, bankers, or consumers. The option sheets permit each of these groups to make noncued decisions as to the action they take. The action of the suppliers is not left to their own option since they conclude the simulated activity and they must reflect the impact of the action of consumers in the marketplace.

Introducing one or more of the option sheets into the chain of events allows for freedom of action and for mistakes to be made. After a cycle has been completed, the action taken by each group should be analyzed in terms of its impact on the others in the chain of events.

If just one option sheet is used in place of the cards, it focuses attention on the correct or incorrect action of that particular group. Two option sheets focus on the two groups involved. Using all three provides the greatest amount of uncontrolled action in the simulation.

It generally will be desirable to go through one or two cycles using the cue cards before introducing the option sheets unless the class is especially well grounded in monetary control policy and consumer economics.

Option Sheet 1

THE FEDERAL RESERVE

Name _____ Class _____

Directions: Your role is to influence the economy through the use of monetary control tools. Listen to the public announcement that is made and then decide what action you will take.

If money supply is high and inflationary pressures are increasing, you will want to take action that decreases money supply — you will tighten the reins. If the situation is reversed, you will want to loosen the reins through appropriate monetary action.

Here is a summary of what you can do and the general effect of each action:

Action	Effect
Lower the reserve requirement to 10%	Increase money supply
Raise the reserve requirement to 20%	Decrease money supply
Lower the discount rate to 10%	Increase money supply
Raise the discount rate to 14%	Decrease money supply
Buy bonds on the open market	Increase money supply
Sell bonds on the open market	Decrease money supply

The action you take will affect the consumer loan policies of member banks, and, subsequently, the action of consumers in the market place.

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Option Sheet 2

BANKERS

Name _____ Class _____

Directions: You must follow the action announced by the Federal Reserve System. The action taken by the Fed will cause you to have more or less money to lend. After listening to the announcement by the Fed you must decide what to do about consumer loans. Here are the choices you can make:

Lend money at 8% annually.
Lend money at 12% annually.
Lend money at 14% annually.
Lend money at 18% annually.
Lend money at 20% annually.
Make no consumer loans.

If the consumers request a loan, announce to them that it has been approved for the amount requested and the amount of the loan has been added to their demand accounts.

Remember: You must make a profit to stay in business, so if the amount of money you have available to lend falls you will have to increase the amount you charge for interest. Of course, at the higher rates of interest consumers will borrow smaller amounts of money. Also, if your money assets drop too low you will be unable to make any loans to consumers. You will, instead, hold your loans for preferred business customers. The action you take will affect consumers in the marketplace and the entire business community.

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary).* 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Option Sheet 3

CONSUMERS

Name _____ Class _____

Directions: You want to borrow money so that you can buy some additional goods and services. You have $200 in coin and currency to spend plus whatever amount you borrow. You do not have to spend all of your coin and currency, but you do have to spend whatever amount you borrow.

After the bankers announce the availability of consumer loans and the annual percentage rate of interest, decide how much you want to borrow. You can borrow any of the following amounts: $200, $150, or $100.

After your loan is aqpproved, decide how much you want to spend. Depending on how you view the future of the economy, you may spend all of your money or hold back 10% of it. Let the suppliers know how much you want to spend for goods and services.

Your action will affect the profit level of suppliers, and, subsequently, business expansion or contraction as well as employment and unemployment.

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

4-3

Increasing Productivity

The Name Tag Factory Simulation

TIME REQUIRED Two class periods

RECOMMENDED GRADE LEVEL 7–12

MAJOR CONCEPTS Productivity; prices; investment; technological change

INSTRUCTIONAL OBJECTIVES Students will

1 Describe how changes in productivity affect prices;

2 Use their decision-making ability to devise methods of increasing production through rises in productivity;

3 Give reasons why productivity increases;

4 Discuss the problems associated with measuring productivity;

5 Analyze the costs and benefits of an increase in productivity.

RATIONALE Students should understand the interrelationship between an individual's role as a consumer and as a worker. This understanding should include the effect of worker productivity on the prices of goods and services available in the marketplace and the relation of productivity to the general standard of living.

MATERIALS

Round 1

— Two copies of each type of instruction card. (This number is enough for up to thirty students split into groups of five.) Directions for preparing the cards appear on page 108.

— Table at front of room on which the following items are displayed in disarray:

5 pairs of scissors
3 rulers
1 pair of compasses
1 small jar or tube of glue
3 black felt-tip pens

— Supply of construction paper in a variety of colors

— At least six copies of a list of about 200 names — male and female, in about equal numbers. A name for this exercise must consist of both a first and a last name. The names should not be in alphabetic order, but all letters from at least A through T should be represented. Telephone directories are a convenient source of names.

Round 2

— Have ready the following supply of cardboard shapes:

2 circles, 4" in diameter
1 circle, 1" in diameter
2 triangles, 1" on each side
2 squares, 1" on a side
2 squares, 3½" on a side
2 rectangles, 2" × 4"

— More and better-quality scissors, pens, and jars of glue than were available in Round 1.

— A copy of Handout 3-4A for each student.

PROCEDURE

1 Begin by giving the class the following directions for Round 1 of the Name Tag Factory simulation:

a "This class is now a name tag factory, and I am the supervisor."

b Select a student to be the quality control expert, and give the "expert" the following instructions: "You will be responsible for accepting or rejecting each group's name tags, using neatness and accuracy as criteria. You will also bring the instruction cards to me and record the number of acceptable tags made by each production team."

c Tell the rest of the class the following: "You are members of the production teams, which will each consist of five people. Now, split into groups of five and assign a number from 1 to 5 to each team member. Each of you will have a specific task to perform on the assembly line based on your particular number in your team. As soon as you are finished organizing yourselves into teams, I will designate one group as Team A, another as Team B, and so on."

d Continue as follows: "Unfortunately, our factory is nearly bankrupt, and the board of di-

rectors blames much of the problem on poor work on the assembly line. Today you must follow directions silently and quickly. Let's try very hard to produce well. You now have 10 minutes to complete this first phase of plant operation. The first person on each team should come to me for an instruction card, which gives directions for each team member. When the person returns for a second set of instructions, it will be a different set from the first."

2 At the end of the ten minutes for Round 1, tell the class that you are disappointed with its productivity. "The factory produced only___name tags with ___workers. That is a productivity rate of only___for ten minutes (output ÷ number of workers = productivity). However, management has just hired a production expert who wants to try an experiment in order to prevent the factory from going bankrupt. She wants each production team to form a 'quality circle'. A quality circle is a method of promoting teamwork as well as worker participation in day-to-day management decisions of the plant.

"Each team is to spend five minutes discussing the methods by which it can increase its productivity. A representative from each team will then present its suggestions to all the other teams. Teams may move their chairs about as needed to make discussion easier. Now you may begin the quality circle discussion."

3 After the discussions, have a student record each team's suggestions on the chalkboard. Accept all suggestions and then allow the class to determine which of the suggestions they will use to increase their productivity during Round 2. Possible suggestions:

- Have more and better-quality materials available, e.g., more and better scissors, glue, pens, etc.
- Instruct each team to produce only one of the three possible designs.
- Place all needed materials closer to workers.
- Have prepared patterns for the various circles, triangles, and squares, etc.
- Take advantage of any special skills of team members, e.g., one student may be most proficient at writing the names quickly and neatly.

4 Tell the class that there will be a second round of production of the name tags. In this round, the tags will be of exactly the same design as those made in Round 1, but the teams will determine the work flow. Teams must, however, adhere to the following ground rules:

- The teacher will assign a design to each team. (All three types of design must be assigned.) Each team must produce as many as possible of the assigned design.
- Teams must use the patterns.
- Each team must work out its own work flow.
- Each team must pick a different set of names (different sequence of letters) from the name list than that used in the first round.

Allow sufficient time for each team to determine its own work flow. Then allow 10 minutes for the second round. Have the quality control person evaluate the new name tags. Determine the productivity ratio for each team. Determine the productivity ratio for the entire class, i.e., add up the total number of name tags produced and then divide by the total number of workers. Compare the productivity ratios achieved in the first and second rounds. There should be an increase in productivity. Have students state what they believe is the primary reason for the change in productivity.

5 Conduct a third round if desired. The increased experience of the students could lead to still greater productivity. Students may wish to refine their plans if a third round is held.

6 Distribute Handout 4-3A and have students read it.

7 Use the questions below for a review of the activity and the reading.

a *If there were no constraints, how could a factory produce even more name tags?* (Through automation, better trained/skilled workers, more effective work procedures, more work shifts in order to use equipment more fully.)

b *How could the quality of the name tags be improved?* (Answers will vary.)

c *How could we classify the suggestions you made to increase productivity after Round 1?* (See "Why does productivity increase?" in Handout 4-3A.)

d *How does investment in new capital goods, in research, and in education and training increase productivity?* (More output per hour of work results.)

e *Have students analyze the table in Handout 4-3A to determine how increased productivity could help the consumer, the worker, or the stockholder.*

f *It was fairly easy to measure productivity in*

our name tag factory. How should teachers measure their productivity? Is a greater quantity of output always better? Would I be more productive if there were 100 students in this class? (It is easier to measure productivity in the production of goods, e.g., name tags, than in the production of services because goods are more tangible than services. Yes, a teacher could be reaching more students if there were 100 per class, but that might well result in a reduction of the quality of the educational experience per student. The question is: what is the acceptable level of quality for the service?)

g Hold a discussion on the meaning of "a higher standard of living." *What does "quality of life" mean to you?* (Answers should include mention of more leisure time, ability to purchase more goods and services of high quality, freedom from excessive health risks as well as other less tangible needs, e.g., affection, friendship.)

h What is likely to happen to consumer prices if:

(1) Wages increase to keep pace with inflation, but productivity doesn't increase at as high a rate? (Consumer prices will rise.)

(2) More people are hired and productivity (output per worker) falls? Rises?

(3) People work fewer hours and productivity rises significantly? Falls?

i Summarize the costs and benefits of increased productivity

EVALUATION

Judge students' achievement of the instructional objectives by their responses to the discussion questions.

DIRECTIONS FOR PREPARING INSTRUCTION CARDS

The instructions in the paragraph below should appear on each card; 5" by 8" index cards are convenient to use. Add specific instructions for one of the three types of name tag to each card in order to have three different sets of instructions.

You and your teammates may use only factory supplies. You will find them on a table at the front of the room. Each member of the team may take only what is needed for that individual's part of the task. The individual must then return the equipment to the table immediately so that others can use it. When the number 1 team member of your team finishes the assigned task, that person must pass the instructions to the number 2 member, and so on.

CARD SET 1

Number 1: Cut out a circle 4" in diameter from construction paper. When you finish, get another set of instructions from the supervisor.

Number 2: Cut out a triangle (1" on each side) from construction paper. Color of paper should be different from that used for the circle.

Number 3: Paste the triangle on the upper right part of the circle.

Number 4: Find the name of a person from the master list whose last name begins with A, B, C, or D. Cross the name off the list and neatly write the name on the circle with a black pen.

Number 5: Write your school's name at the bottom of the name tag with the black pen. Signal the quality control expert, who will accept or reject the name tag.

CARD SET 2

Number 1: Cut a 3½" square from construction paper. When you finish, get another set of instructions from the supervisor.

Number 2: Cut out a 1" square from construction paper. Color of paper should be different from that used for the first square.

Number 3: Paste the smaller square on the upper right part of the larger square.

Number 4: Write your school's name at the bottom of the name tag with a black pen.

Number 5: Find the name of a person from the master list whose last name begins with I, J, K, or L. Cross the name off the list and neatly write the name on the square with the black pen. Signal the quality control expert, who will accept or reject the name tag.

CARD SET 3

Number 1: Cut out a 2" by 4" rectangle from construction paper. When you finish, get another set of instructions from the supervisor.

Number 2: Cut out a circle 1" in diameter from construction paper. Color of paper should be different from that used for the rectangle.

Number 3: Write your school's name at the bottom of the name tag with a black pen.

Number 4: Find the name of a person from the master list whose last name begins with Q, R, S, or T. Cross the name off the list and neatly write the name in the middle of the rectangle with the black pen.

Number 5: Paste the circle on the upper right part of the rectangle. Signal the quality control expert, who will accept or reject the name tag.

Handout 4-3A

PRODUCTIVITY

Whether the United States can achieve a steadily rising standard of living to a large extent depends upon what happens to productivity in our economy. Productivity directly affects the amounts of goods and services available to U.S. consumers. It also affects the level of competitiveness of our industries in the world market.

WHAT IS PRODUCTIVITY?

Productivity is most often defined as the amount of goods and services produced per hour of work. This measure refers to labor productivity. (Productivity can also be measured with respect to machinery, land, or other agents contributing to output.)

WHY IS GROWTH IN PRODUCTIVITY IMPORTANT?

In the early 1980s, the United States produced almost three times the amount of goods and services it produced in 1950. The population had meanwhile grown considerably. Still, the United States produced nearly twice as much per person as in 1950 — although each worker on average worked fewer hours. In other words, productivity rose, thus enabling each individual to enjoy more goods and services. That is the major reason why increases in productivity are so important.

Increases in productivity can hold prices down or allow them to decline. Increasing productivity can also allow wages to rise without causing prices to go up. A numerical example may help (see Table A at the end of this handout). To begin with, suppose it takes a group of workers a total of 20 hours to assemble a personal computer and each worker is paid $10 per hour ($200 in all). Other costs ($650) and the $150 profits earned total $800. The computer can thus be sold to the retailer for $1000. If the workers adopt a new technique that increases productivity, the time required to build the computer might fall to 10 hours. Now the management has many choices. Here are some: If the price remains the same the worker's wages could increase to $20 per hour or profits per computer could increase by $100 per computer. If the wages and profits per computer each go up somewhat, the price can be lowered to $945 and more computers could probably be sold. If wages and prices remain the same as at the beginning, the price per computer can decline to $900, thus probably enabling sales to grow even more. The table shows how rising productivity can allow wages, profits, and/or prices to the consumer to change.

WHY DOES PRODUCTIVITY INCREASE?

Output per hour of work can increase for several reasons. Among them are:

1 Using better quality machines and tools;

2 Installing machines and tools for processes formerly done by hand;

3 Giving workers more education and training;

4 Changing the methods and organization of production;

5 The continuing shift of economic resources from less productive to more productive uses or industries.

It has been estimated that about three-quarters of the growth in total U.S. output has been due to an increase in productivity caused primarily by the above factors. About one-fourth has been due to an increase in the number of workers.

Continued

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary).* 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Table A Calculating Productivity

	Labor Costs (1)		Other Costs (2)		Profit (3)		Price per Unit (1) + (2) + (3)
Beginning situation	20 hours × $10 per hour						
	$200	+	$650	+	$150	=	$1000
After increase in productivity							
Option A	10 hours × $20 per hour						
	$200	+	$650	+	$150	=	$1000
Option B	10 hours × $10 per hour						
	$100	+	$650	+	$250	=	$1000
Option C	10 hours × $12 per hour						
	$120	+	$650	+	$175	=	$ 945
Option D	10 hours × $10 per hour						
	$100	+	$650	+	$150	=	$ 900

From *Master Curriculum Guide in Economics: Teaching Strategies for Consumer Economics (Secondary)*. 1985. Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Suggested Supplementary Materials and Sources of Information

Vast amounts of teacher and pupil materials are available on consumer economics topics. What follows is a brief selection from a variety of sources. It is not a complete list of appropriate materials but rather a guide to many useful commercial and noncommercial products.

MAJOR NATIONAL ORGANIZATIONS

The following organizations publish journals, newsletters, and monographs on economic affairs, many of which relate to topics in consumer economics. You may wish to write to these organizations in order to obtain their catalogs and ordering information.

AFL-CIO
Education Department
815 Sixteenth Street, NW
Washington, DC 20006

American Bankers Association
Fund for Education in Economics
1120 Connecticut Avenue, NW
Washington, DC 20036

American Council on Consumer Interests
162 Stanley Hall
University of Missouri
Columbia, MO 65211

American Council on Life Insurance
1850 K Street, NW
Washington, DC 20006

American Home Economics Association
2010 Massachusetts Avenue, NW
Washington, DC 20036

American Stock Exchange
86 Trinity Place
New York, NY 10006

Chamber of Commerce of the United States
1615 H Street, NW
Washington, DC 20062

Changing Times Education Service
1729 H Street, NW
Washington, DC 20062

The Conference Board, Inc.
845 Third Avenue
New York, NY 10022

Consumer Federation of America
1314 Fourteenth Street, NW
Washington, DC 20005

Consumers Union of the United States, Inc.
256 Washington Street
Mount Vernon, NY 10550

Council of Better Business Bureaus, Inc.
1515 Wilson Boulevard, Suite 300
Arlington, VA 22209

Credit Union National Association
Box 431
Madison, WI 53701

The Direct Selling Education Foundation
Suite 610
1730 M Street, NW
Washington, DC 20036

Federal Reserve System
20th Street and Constitution Avenue, NW
Washington, DC 20551

Federal Trade Commission
Consumer Education Division
Sixth Street and Pennsylvania Avenue
Washington, DC 20580

Insurance Information Institute
110 William Street
New York, NY 10038

Joint Council on Economic Education
2 Park Avenue
New York, NY 10016

Money Management Institute
Household International
2700 Sanders Road
Prospect Heights, IL 60070

National Business Education Association
1908 Association Drive
Reston, VA 22091

National Coalition for Consumer Education
2025 Eye Street, NW, Suite 1104
Washington, DC 20006

National Consumers League
1522 K Street, NW
Suite 406
Washington, DC 20005

National Council for the Social Studies
3501 Newark Street, NW
Washington, DC 20016

New York Stock Exchange
11 Wall Street
New York, NY 10005

Office of Consumer Affairs
1003 Premier Building
Washington, DC 20201

SELECTED PERIODICALS AND PAMPHLETS

Balance Sheet, The. South-Western Publishing Co., 5101 Madison Road, Cincinnati, OH 45227. Provides business education and economics teachers with many informative articles dealing with instructional techniques. In addition, has discussions of various issues relevant to teaching consumer economic units. Free to classroom teachers upon request.

Bannister, Rosella, and Charles Monsma. *Classification of Concepts in Consumer Education.* South-Western Publishing Company Monograph 137, 1982. (Address: 2101 Madison Road, Cincinnati, OH 45227.) Provides a conceptual framework for consumer education. The framework has been used for a number of textbooks and supplementary materials.

Business Education World. Gregg Division, McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020. Issued three times a year. Focuses on teaching strategies and issues for the business education teacher. Includes articles for the consumer education teacher.

Business Exchange. Houghton Mifflin Book Company, One Beacon Street, Boston, MA 02107. Issues published in fall, winter, and spring. Contains articles relating to business education courses, including consumer economics.

Changing Times. Kiplinger Washington Educators, Inc., 1729 H Street, NW, Washington, DC 20006. Monthly. Includes articles relating to various consumer topics.

Consumer Protection: Gains and Setbacks. Editorial Research Reports, March 1978. Congresssional Quarterly, Inc., 1414 22 Street, NW, Washington, DC 20037. Assesses marketplace gains; addresses state and local organizations; looks at future of American consumerism.

Consumer Reports. Consumers Union of the United States, Inc., 256 Washington Street, Mount Vernon, NY 10550. Monthly. Includes articles on products tested, current consumer legislation, and analysis of various consumer issues. Classroom copies are available at special reduced rate.

Economic Road Maps. Education Department, The Conference Board, Inc., 845 Third Avenue, New York, NY 10022. Very useful tool. Provides teachers with data relating to the level of business activity, technological change, wages, inflation, and so on. Also has charts and tables sufficiently large to make into transparencies. Request copies.

Facts and Figures on Government Finance. Tax Foundation, Inc., One Thomas Circle, NW, Washington, DC 20005. Annual plus monthly newsletters. Invaluable source of information on government taxes and expenditures as well as the impact of taxes on individuals and businesses.

Historical Chart Book. Publications Services, Division of Administrative Services, Board of Governors of the Federal Reserve System, Washington, DC 20551. Published in September. Covers major economic and financial data on the American economy. Charts are of sufficiently good quality to make into transparencies.

Journal of Business Education, The. Heldref Publications, 4000 Albemarle Street, NW, Washington, DC 20016. Monthly from October to May. By subscription only. Articles relate to all aspects of business education, including consumer education and other basic business courses.

Journal of Home Economics. American Home Economics Association, 2010 Massachusetts Avenue, NW, Washington, DC 20036. A reference journal published in the spring, summer, fall, and winter. Deals with many topics in home economics and consumer economics, including government, family, and industry roles.

Money. Time, Inc., 541 North Fairbanks Court, Chicago, IL 60611. Monthly. Ready source for student projects and activities.

Money Management Institute Memo. Money Management Institute, Household International, 2700 Sanders Road, Prospect Heights, IL 60070. Published in the spring and fall. Contains ideas and information relating to issues in money management and economic education that have immediate applicability in the classroom. Also advises teachers on the availability of materials.

Monsma, Charles M. *Developing a Mediating Capacity: Implications for Consumer Studies.* Ypsilanti, MI: Michigan Consumer Education Center, 1983. Looks at social structures that have institutions from which they obtain products and services. Suggestions are made for mediating structures that can intervene, resolve conflict, and lessen individual frustrations.

Pringle, Lawrence. *The Economic Growth Debate: Are There Limits to Growth?* 1978. Franklin Watts, Inc., 387 Park Avenue South, New York, NY 10016. Discusses problems of economic growth and whether future growth should be limited.

SUPPLEMENTARY TEACHING AIDS

Audiovisual Materials

Basic Economics, 1979. 4 filmstrips, 4 cassettes, 24 skill extenders plus guide; avg. 70 frames and 11 min. per strip. For grades 9–14. Titles are: Understanding Basic Factors, The Consumer's Role, Understanding Economic Trends, Making Financial Decisions. Society for Visual Education, 1345 Diversey Parkway, Chicago, IL 60614.

Budgeting Your Money, 1978. 4 filmstrips, 4 cassettes, teacher's guide with script; avg. 55 frames and 11 min. per strip. Program titles are: Why Budget? Planning a Budget, Living with a Budget, Revising a Budget. For teenagers. Society for Visual Education, 1345 Diversey Parkway, Chicago, IL 60614.

Buying Sight Unseen, 1981. 4 filmstrips, 4 cassettes; avg. 57 frames and 11 min. each filmstrip. Complete set includes teacher's manual and 29 reproducible worksheets. Titles: Advertising and Mail Order, Shopping by Mail, Placing Your Order, Fraud and Mail Orders. Subjects: newspaper and magazine ads, catalogs, door-to-door selling techniques, correct procedure for placing

an order, warranties, and common types of mail fraud. Grade level: 9-junior college. Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, IL 60614.

Choice$, Choice$, Choice$, 1980. 107 slides and cassettes; 13 min. An introduction to financial planning and decision making. Shows how families at various stages of their lives use financial management as a tool for coping. For teenagers and adult education classes. Dept. of Consumer Sciences and Housing, Colorado State University, Fort Collins, CO 80523.

Consumer Awareness: Supply, Demand, Competition, and Prices, 1981. Filmstrip with cassette; 85 frames, 11 min. An introduction to basic economics for consumer classes. Includes a discussion of the differences between a planned and a market economy. For grades 4–10. Maclean Hunter Learning Resources, 708 Third Avenue, New York, NY 10017.

Decisions, Decisions: Preparing for a Lifetime of Financial Responsibility, 1983. 80 slides with cassette and script; 15 min. Intended as an introduction to the importance of financial planning in the school curriculum and for use in staff development workshops. American Council of Life Insurance, 1850 K Street, NW, Washington, DC 20006.

On Your Own: Money Management Kit, 1981. Filmstrip and cassette plus teacher's guide, wall chart, 7 duplicating skill masters, money management calendar, and 2 credit brochures; 105 frames; 15 min. Particularly for ninth to twelfth grade students intending to borrow money. Problems are presented and responses are given by financial counselors. National Credit Union Youth Program, CUNA Mutual Insurance Group, P.O. Box 391, Madison, WI 53791.

The People on Market Street, 1977. Color films and teacher's guides. (Also available as filmstrips.) Titles: Scarcity and Planning (17 minutes), Cost (19 minutes), Demand (21 minutes), Supply (20 minutes), Market-clearing Price (23 minutes), Wages and Production (18 minutes). Walt Disney Educational Media Company, 500 South Buena Vista Street, Burbank, CA 91521.

Spending Money Wisely, 1980. 5 filmstrips, 5 cassettes; avg. 45 frames and 15 min. per filmstrip. Kit for each filmstrip includes 30 student response booklets and teacher's guide. Five topics: budgeting, housing, food, buying a car, and maintaining a car. For grades 6–12. Media Materials, Inc., 2936 Remington Avenue, Baltimore, MD 21211.

To Your Credit: How Federal Reserve System Regulations Work for You, 1980. Color sound film, 14 min. Free loan, regional Federal Reserve Banks. Particular attention is given to consumer credit rights dealing with equal opportunity, truth in lending, etc., showing violations of federal credit regulations and remedies. Baker Productions, Inc., 1503 Walnut Street, Philadelphia, PA 19102.

Other Materials

Competency-based Consumer Education, 1980. Developed by Elaine Douma. Educational Improvement Center-Northeast, 202 Johnson Road, Bldg. No. 3, Morris Plains, NJ 07950. Subjects covered: consumer decision making, resource management, rights and responsibilities, and knowledge of marketplace.

Consumer Education Resource Materials Kit, 1983 edition. Prepared by Stewart M. Lee. Geneva College, Beaver Falls, PA 15010. These kits, prepared for consumer educators' workshops, contain a variety of materials collected over the years, covering such topics as consumerism, consumer projects, competencies, career opportunities, personal finance, federal government information. Also has annotated lists of books, periodicals, films, filmstrips, and slide sets.

Herbst, Judith; Annie Mueser; and Ruth Handel. *Real Life Consumer Economics*. Scholastic Book Services, 50 West 44th Street, New York, NY 10036. 1979. A workbook of activities and brief explanations of topics in consumer education, such as budgeting, comparison shopping, selection of a doctor, savings accounts, checking accounts, taxes. Emphasizes written exercises.

How Will You Manage Your Money? Continental Illinois Corporation, 231 South La Salle Street, Chicago, IL, 60697. 1977. A revised edition of the Family Financial Education Program developed by the Continental Corporation. Units include (1) Money — What It Is and What It Does, (2) Money Management, and (3) Wise Use of Credit. Each unit includes background information, suggested teaching activities, and activity masters. For junior and senior high school.

Money Management Kit, rev. ed. 1982. Six multimedia kits. Titles are: Money Management, The Marketplace, Consumer Law, Insurance, Housing, Saving and Investing; includes 126 students texts — 21 for each kit. Each kit includes 21 softcover student texts, teacher's guide with blackline originals, one simulation game, one bulletin board project, and one cassette. Each kit is a complete teaching unit on the subject. For teenagers. Request 4-page information brochure for individuals items and for preview information. Changing Times Education Service, EMC Publishing, 180 East Sixth Street, St. Paul, MN 55101.

Oshiro, Carl, and Henry Snyder. *Getting Action; How to Petition State Government*: Consumers Union, 256 Washington Street, Mount Vernon, NY 10550. 1980. Contains overview and analysis of the administrative petitioning process, comments on agency hearings and denials, and a "petitioner's kit."

Productivity . . . And Your Part in It. The Advertising Council, 825 Third Avenue, New York, NY 10022. A brochure explaining productivity and how it affects Americans and their economic system.

You, The Consumer, in the American Economy, 1982. By LaNeta L. Carlock. 11 transparencies, 24-page teacher's guide. National Instructional Systems, Inc., P.O. Box 1177, Huntington Beach, CA 92647. Topics covered include how our economic system works, consumer decision making, consumer problems, stretching your dollars, sources of information, rights and responsibilities.

JOINT COUNCIL ON ECONOMIC EDUCATION MATERIALS

Give and Take. An audiovisual series on topics and con-

cepts in personal economics for use in grades eight through ten. It consists of twelve 15-minute programs for use in consumer education, economics, business education, home economics, social studies, and other classes in which material on personal economics is presented. The series — including components for classroom instruction—was produced jointly by the Joint Council on Economic Education (JCEE), the Agency for Instructional Technology (AIT), and the Canadian Foundation for Economic Education (CFEE). "Give & Take" is designed to help young people increase their understanding of economic concepts; improve their personal decision-making skills; and become more knowledgeable consumers, workers, and citizens. *Important:* If you are located in a state that is a member of the AIT consortium, tapes can be made available to you free of charge. (Alabama, Arizona, Delaware, Montana, Nevada, New Hampshire, Wyoming are *not* in the consortium.) If necessary write to the JCEE for the name of the consortium agency in your state. "Give & Take" is also being shown by many Public Broadcasting Service television stations. The series can also be purchased from AIT, Box A, Bloomington, IN 47402.

The titles of the twelve programs are:

1 YOU CHOOSE/Scarcity and Personal Decision Making
2 WE CHOOSE/Scarcity and Social Decision Making
3 LET'S SAVE/Opportunity Cost
4 CREDITWISE/Opportunity Cost
5 WHERE DO JOBS COME FROM?/Derived Demand
6 A KEY TO PRODUCTIVITY/Human Capital
7 PRIVATE OR PUBLIC?/Public Goods and Services
8 CHANGING TAXES/Public Goods and Services
9 MARKET PRICES/Supply and Demand
10 THE CHANGING MARKET/Supply and Demand
11 TAKE YOUR CHOICE/Substitution
12 WHY COMPETITION?/Market Structure

A normed test with manual, a bank of test questions for each program, a teacher's guide, and a workshop leader's handbook are also available.

TAX WHYS: Understanding Taxes. An audiovisual series on principles of taxation for high school students in business education, consumer education, career education, and economics. The series was produced by the Joint Council on Economic Education and the Agency for Instructional Technology (AIT) with funds provided by the Internal Revenue Service. The series includes six 15-minute films/video tapes as well as a Teacher's Guide, a Workshop Leader's Handbook, and information/promotion materials. For information on how to obtain the films or tapes, write to AIT, Box A, Bloomington, IN 47402-0120 or call (800) 457-4509. For information on how to obtain the print materials, write to your district IRS office to the attention of the Understanding Taxes Coordinator or to Taxpayer Information and Educational Research, Internal Revenue Service, Room 715, 1111 Constitution Avenue, NW, Washington, DC 20224.

The titles of the six programs are:

1 Taxes Raise Revenue
2 Taxes Influence Behavior
3 Taxes Involve Conflicting Goals
4 Taxes Affect Different Income Goals
5 Taxes . . . Can They Be Shifted?
6 Taxes . . . What Is Fair?

Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts, 1984. Presents concise statements of the basic concepts and generalizations used to teach economics in the K–12 curriculum. These concepts also serve to summarize the structure of economics as understood by the majority of economists and economic educators. By Phillip Saunders, G.L. Bach, James D. Calderwood, and W. Lee Hansen.

Master Curriculum Guide in Economics: Teaching Strategies for Basic Business and Consumer Education (Secondary), 1979. Presents lessons suitable for either basic business or consumer education courses that aim at preparing students to use sound economic analysis in making decisions as consumers, producers, and citizens. Contains an overview for teachers, a glossary for students, and a bibliography. By James F. Niss, Judith Staley Brenneke, and John E. Clow.

Consumer and Personal Economics

Consumer Education and Economic Education in the Public Schools, 1981. Proceedings of a conference funded by the U.S. Department of Education at which leaders in consumer and economic education considered what has been done and should be done to integrate economics into consumer education courses. Among the topics covered are the nature of economic education, the nature of consumer education, discussions of curriculum units that combine the two subjects, and the economic content of printed materials for consumer education. Edited by Judith Staley Brenneke.

Integrating Consumer and Economic Education into the School Curriculum, 1981. A practical handbook which presents orientation, guidelines, and methods of integrating economics into consumer education. Funded by the U.S. Department of Education. By Judith Staley Brenneke.

Catalogs

Audiovisual Materials for Teaching Economics, third edition, 1980. Annotates more than 600 AV items for kindergarten through college. Describes the process for choosing the entries, lists items by grade level, and provides names and addresses of publishers and distributors. By Charlotte T. Harter, David M. Nelson, and John P. Farrell.

A Guide to Games and Simulations for Teaching Economics, third edition, 1979. Annotations of 130 items. Since games and simulations are now widely accepted, this edition puts more emphasis than the previous ones on the construction, selection, evaluation, and use of noncomputer games and less on how to play them. Contains lists of other catalogs, journals, and newsletters in the field as well as the names and addresses of publishers of games and simulations. By Cathy R. Wilson and Mark C. Schug.

Economics/Political Science Series

Analyzing Inflation and Its Control: A Resource Guide, 1983. The overview contains a comprehensive discussion of

the phenomenon of inflation and the various price indexes used to measure it. Takes up the causes of and cures for inflation as well as recent inflation experience in the United States and other countries. Explores the role of money creation and government deficits. Considers the effect of inflation on the economic behavior of individuals, businesses, and government. Also analyzes — among other matters — which groups in the population lose or gain most from inflation. Contains instructional activities and materials for classroom use. By Michael K. Salemi and Sarah Leak.

Analyzing Tax Policy: A Resource Guide, 1979. Takes up the role of taxes in the economy, the various kinds of taxes, the criteria for evaluating the merits and demerits of taxes, and some political aspects of taxation. Also covers recent developments including the property tax limitations in California mandated by "Proposition 13." Contains overview for teachers, instructional activities, and materials for classroom use. By Thomas R. Swartz, John Roos, and John S. Morton.

Analyzing Government Regulation: A Resource Guide, 1978. Examines the wide variety of private and government agencies and government regulations that affect the marketplace in the context of the economic and political justifications of government regulation. Contains overview for teachers, instructional activities, and materials for classroom use. By John F. Bibby, Leon M. Schur, and George G. Watson Jr.

Analyzing Health Care Policy: A Resource Guide, 1977. Considers the economic and political issues involved in setting a national policy on health care. Contains overview for teachers, instructional activities, and materials for classroom use. By Laurence E. Learner, Paul A. Smith, and Lawrence W. Bloch.

Awards Program

Economic Education Experiences of Enterprising Teachers. Descriptions of award-winning entries and brief summaries of other ideas submitted by teachers to the annual National Awards Program for the Teaching of Economics. New edition each year.

Classification of Lessons by Economic Concepts and Consumer Economics Teaching Units

KEY ECONOMIC CONCEPTS[a]		CONSUMER ECONOMICS TEACHING UNITS									
		Budgeting Time and Money	Buying Goods and Services	Characteristics of the Economy	Decision Making	Earning an Income	Government Regulation	International Trade	Public Goods and Services	Sources of Consumer Info.	Entrepreneurship
FUNDAMENTAL ECONOMIC CONCEPTS	Scarcity	1.4 1.6	1.1 2.1 2.3	2.1	1.1 1.4 2.3	1.4 1.6		1.1	2.3	2.3	
	Opportunity Cost	1.4 1.6	1.1 1.2 4.3	4.3	1.1 1.2 1.3 1.4	1.3 1.4 1.6 4.3	3.4	1.1	1.2	3.4	1.3 3.4
	Productivity	1.4 1.5 1.6	2.1 4.3	2.1 2.2 4.3	1.3 1.4 1.5	1.3 1.4 1.6 4.3				2.2	2.2 1.3
	Economic Systems			3.2			3.2		3.2		
	Economic Institutions and Incentives	1.4			1.3 1.4	1.3 1.4	3.4			3.4	1.3 3.4
	Exchange, Money, and Interdependence		2.1	2.1							
MICROECONOMIC CONCEPTS	Markets and Prices	1.4	1.2 2.1 2.3 2.4 4.3	2.1 2.2 3.2 3.3 4.1 4.2 4.3	1.2 1.4 2.3 2.4 4.1	4.3 1.4	3.2 3.3 4.1 4.2	4.1	1.2 2.3 3.2	2.2 2.3 2.4	2.2
	Supply and Demand			3.3 4.1	4.1		3.3 4.1	4.1			
	Competition and Market Structure		1.2	4.1	1.2 4.1		3.1 4.1	4.1	1.2 3.1		
	Income Distribution			3.3			3.3				
	Market Failures		1.1	3.2	1.1		3.1 3.2	1.1	3.1 3.2		
	Role of Government		1.2	3.2 4.1 4.2	1.2 4.1		3.1 3.2 4.1 4.2	4.1	1.2 3.1 3.2		
MACROECONOMIC CONCEPTS	Gross National Product (GNP)	1.6				1.6					
	Aggregate Supply						3.1		3.1		
	Aggregate Demand		4.3	2.2 4.2 4.3	1.3	1.3 4.3	4.2			2.2	1.3 2.2
	Unemployment										
	Inflation and Deflation										
	Monetary Policy			4.1 4.2	4.1		3.1 4.1 4.2	4.1	3.1		
	Fiscal Policy			4.1 4.2	4.1		3.1 3.4 4.1 4.2	4.1	3.1	3.4	3.4
INT'L. ECON. CONCEPTS	Abs. and Comp. Advantage and Barriers to Trade	1.5	1.1		1.1 1.5			1.1			
	Exchange Rates and Balance of Payments										
MEASUREMENT CONCEPTS AND METHODS			2.4							2.4	

[a]From *Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts*, second edition (New York: Joint Council on Economic Education, 1984).

MASTER CURRICULUM GUIDE IN ECONOMICS

A FRAMEWORK FOR TEACHING THE BASIC CONCEPTS

TEACHING STRATEGIES:

Primary Level (Grades 1–3)

Intermediate Level (Grades 4–6)

Junior High School Level (Grades 7–9)

Basic Business and Consumer Education (Secondary)

Consumer Economics (Secondary)

High School Economics Courses

United States History (Secondary)

World Studies (Secondary)

Using Economics in Social Studies Methods Courses (College Level)

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